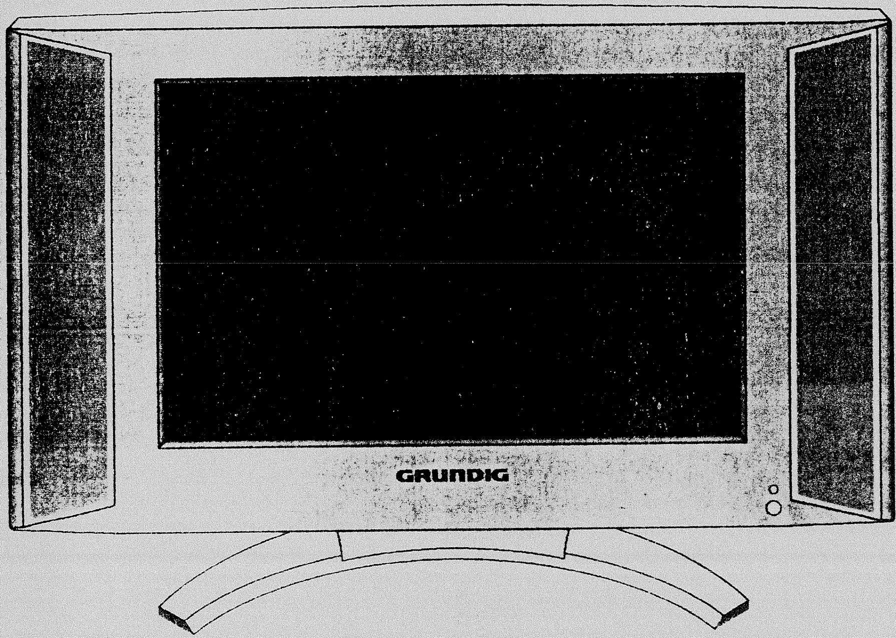
GRUNDIG

CTV Service Manual

AMIRA 30

LW 76-9401 TOP

GBC1700



NUR FÜR INTERNEN GEBRAUCH
FOR INTERNAL USE ONLY

Zusätzlich erforderliche Unterlagen für den Komplettservice
Additionally required Service Documents for the Complete Service

Service Manual
Sicherheit
Safety
Materialnr./Part No.
720108000001

Materialnummer/Part Number 720100511000
Änderungen vorbehalten/Subject to alteration
H-S43 0105
http://www.grundig.com

Es gelten die Vorschriften und Sicherheitshinweise gemäß dem Service Manual "Sicherheit", Materialnummer 720108000001, sowie zusätzlich die eventuell abweichenden, landesspezifischen Vorschriften!

The regulations and safety instructions shall be valid as provided by the "Safety" Service Manual, part number 720108000001, as well as the respective national deviations.

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Allgemeiner Teil

Allgemeine Hinweise

Vor dem Öffnen des Gehäuses den Netzstecker ziehen!

Achtung: ESD-Vorschriften beachten

Leitungsverlegung
Bevor Sie die Leitungen und insbesondere die Masseleitungen lösen, muss die Leitungsverlegung zu den einzelnen Baugruppen beachtet werden.
Nach erfolgter Reparatur ist es notwendig, die Leitungsführung wieder in den werkseitigen Zustand zu versetzen um evtl. spätere Ausfälle oder Störungen zu vermeiden.

Durchführen von Messungen
Bei Messungen mit dem Oszilloskop an Halbleitern sollten Sie nur Tastköpfe mit 10:1 - Teiler verwenden. Außerdem ist zu beachten, dass nach vorheriger Messung mit AC-Kopplung der Koppelkondensator des Oszilloskops aufgeladen sein kann. Durch die Entladung über das Messobjekt können Bauteile beschädigt werden.

Messwerte und Oszillogramme
Bei den in den Schaltplänen und Oszillogrammen angegebenen Messwerten handelt es sich um Näherungswerte!

General Section

General Notes

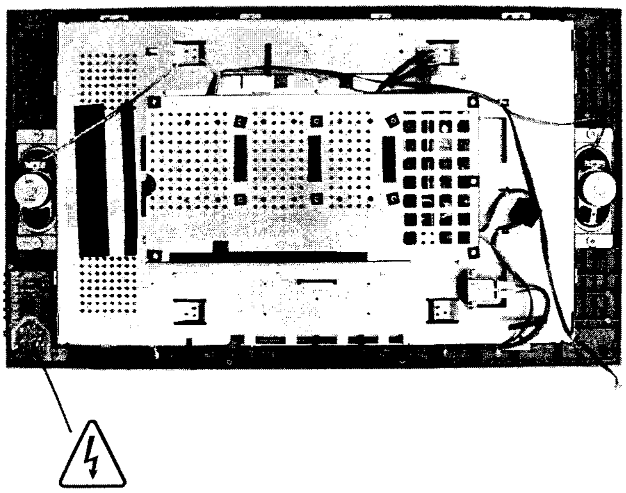
Before opening the cabinet disconnect the mains plug!

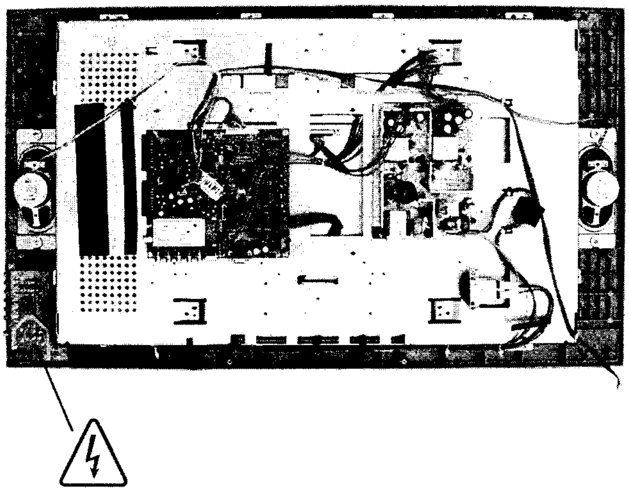
Attention: Observe the ESD safety regulations

Wiring
Before disconnecting any leads and especially the earth connecting leads observe the way they are routed to the individual assemblies. On completion of the repairs the leads must be laid out as originally fitted at the factory to avoid later failures or disturbances.

Carrying out Measurements
When making measurements on semi-conductors with an oscilloscope, ensure that the test probe is set to 10:1 dividing factor. If the previous measurement was made on AC input, please note that the coupling capacitor in the oscilloscope will be charged. Discharge via the item being checked can damage the components.

Measured Values and Oscillograms
The measured values given in the circuit diagrams and oscillograms are approximates!





Technische Daten / Technical Data

	AMIRA 30 LCD 76-9401 TOP (TM9)
TFT LCD Panel	
Sichtbares Bild Visible picture	76cm
Bildschirmdiagonale Screen diagonal	76cm (30")
Maximale Auflösung Resolution max.	1280 x 768 Pixel
Kontrastverhältnis Contrast ratio	600:1
Leuchtdichte Brightness	600cd/m^2
Betrachtungswinkel Viewing angel	170° horizontal, 170° vertikal 170° horizontal, 170° vertical
Display-Trägheit Response time	16ms (typ.)
Elektronik / Electronic	
Programmspeicherplätze Programme positions	99 + 5AV
Tuner	1 terr. PLL Frequenz Synthesizer Tuning, global Pinning
TV-Normen TV-Standards	PAL, SECAM, über/via AV NTSC 3.58/4.43MHz, B/G, L/L', I, D/K/K'
Stereo Systeme Stereo systems	German A2 (B/G/D/K/I) Nicam 5.85MHz (BG, L) + 6.52MHz (I)
Videotext Teletext	124-Seiten / pages
Musikleistung Music power	2 x 7W (2 x 5W Sinus)
Anschlüsse Rückwand / Connections Rear Panel	
Euro AV 1	FBAS Ein-/Ausgang, RGB Eingang, SBAS Eingang, Audio Ein-/Ausgang CCVS in-/output, RGB input, SCVS input, Audio in-/output
Euro AV 2	FBAS Ein-/Ausgang, Audio Ein-/Ausgang CCVS in-/output, Audio in-/output
Cinch-AV-Buchse Eingang Cinch-AV socket input	FBAS Eingang, 2x Audio Stereoeingang CCVS input, 2x audio stereo input
S-Videoeingangsbuchse S-Video input socket	4-polige Hosidenbuchse 4-pin mini-Din
LINE-Buchse Ausgang LINE socket output	2x Audio (Stereo) 2x audio (stereo)
VGA	Bildschirmauflösung / Screen resolution 1280 x 768 Pixel
Kopfhörerbuchse Headphone jack	Stereoklinkenbuchse mit Lautsprecher Abschaltung (3,5mm) Stereo minijack with speaker cut off (3.5mm)
Netzteil / Mains Stage	
Netzspannung (Regelbereich) Mains voltage (variable)	220-240V AC
Netzfrequenz Mains frequency	50 / 60Hz
Leistungsaufnahme Power consumption	ca. 180W
Standby	ca. 3W

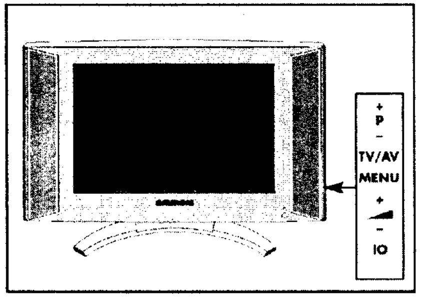
Bedienhinweise

Dieses Kapitel enthält Auszüge aus der Bedienungsanleitung.

Weitergehende Informationen entnehmen Sie bitte der gerätespezifischen Bedienungsanleitung, deren Materialnummer Sie in der entsprechenden Ersatzteilliste finden.

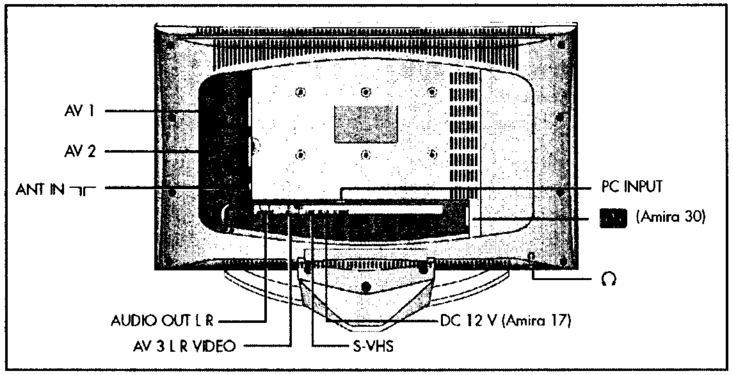
AUF EINEN BLICK

Die Bedienelemente des Fernsehgerätes



●	Betriebsanzeige.
+ P -	Schalten das Fernsehgerät aus Stand-by ein; schrittweise Programmwahl.
TV/AV	Wählt AV-Programmplätze und das zuletzt gesehene Fernseh-Programm.
MENU	Ruft das »HAUPTMENÜ« auf.
+ ◢ -	Verändern die Lautstärke.
IO	Schaltet das Fernsehgerät in Stand-by und wieder aus.

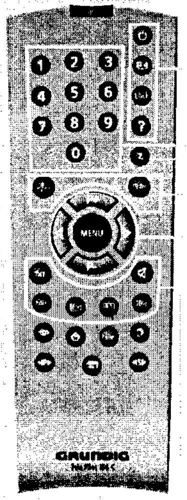
Die Anschlüsse des Fernsehgerätes



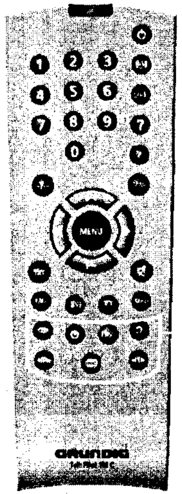
AV 1	Euro/AV-Buchse (FBAS).
AV 2	Euro/AV-Buchse.
ANT IN ⊣⊢	Antennenbuchse.
AUDIO OUT L R	Tonsignal-Ausgang.
AV 3 L R VIDEO	Ton-/Bildsignal-Eingang.
S-VHS	Bildsignal-Eingang S-VHS.
DC 12V	Anschlussbuchse für Netzteil (Amira 17).
■	Netzbuchse (Amira 30).
PC INPUT	VGA Anschluss für PC.
🎧	Kopfhöreranschluss (3,5 mm ø Klinke).

AUF EINEN BLICK

Die Fernbedienung



⏻	Schaltet das Fernsehgerät ab (Stand-by).
⊡	Schaltet das Bildformat um. schaltet auf doppelte Zeichengröße im Videotext-Betrieb.
Lock	Ruft das Menü »MERKMALE« auf.
?	Blendet die Statusanzeige ein/aus.
1...0	Schalten das Fernsehgerät aus Stand-by ein; wählen Fernseh-Programme direkt.
z	Schaltet zwischen zwei ausgewählten Fernseh-Programmen hin und her.
-/--	Schaltet zwischen ein- und zweistelligen Programmplätzen um.
TV/AV	Schaltet auf die AV-Programmplätze und zurück zum zuletzt gesehenen Fernseh-Programm.
P+, P-	Schalten das Fernsehgerät aus Stand-by ein; wählen Programme schrittweise; bewegen Cursor nach oben/unten.
MENU	Ruft das »HAUPTMENÜ« auf.
◀ ▶	Ändern die Lautstärke; bewegen Cursor nach links/rechts.
TXT	Schaltet um zwischen Videotext-Betrieb und TV-Betrieb.
🔇	Ton aus/ein (stummschalten).
Mix	Mixbetrieb von Videotext und Fernsehbild.
≡×	Aktualisiert eine Seite im Videotext-Betrieb.
≡?	Antwortfreigabe im Videotext-Betrieb.
Stop	Seitenstop im Videotext-Betrieb.



AUF EINEN BLICK

👁	Ruft das Menü »BILD« auf; blättert im Videotext-Betrieb eine Seite zurück.
⏲	Uhrzeit ein/aus; blättert im Videotext-Betrieb zur nächsten Seite.
Timer	Ruft das Menü »TIMER« auf; wählt gewünschtes Kapitel im Videotext-Betrieb.
👂	Ruft das Menü »TON« auf; wählt gewünschtes Thema im Videotext-Betrieb.
-|P|-	Wählt verschiedenen Bildeinstellungen.
▤	Schaltet auf den Programmplatz PC; wählt Mehrfachseiten im Videotext-Betrieb.
-|S|-	Wählt verschiedenen Toneinstellungen.

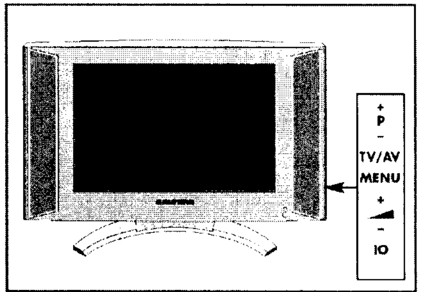
Operating Hints

This chapter contains excerpts from the operating instructions.

For further particulars please refer to the appropriate user instructions the part number of which is indicated in the relevant spare parts list.

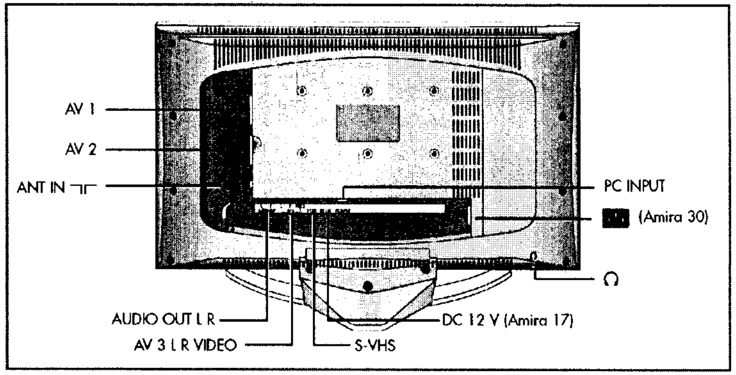
OVERVIEW

Operating controls on the television

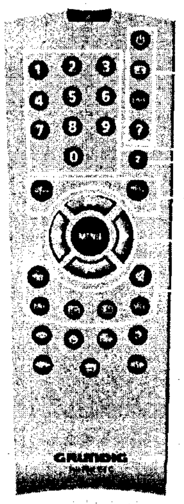


●	Operation indicator.
+ P -	Switches the television on from standby. Channel selection.
TV/AV	Switches to the AV channel positions and back to the television channel last selected.
MENU	Calls up the »MAIN MENU«.
+ ◢ -	Adjusts the volume.
IO	Switches the television into and out of standby mode.

Connections on the television



AV 1	Euro/AV socket (FBAS).
AV 2	Euro/AV socket.
ANT IN ⊣⊢	Antenna socket.
AUDIO OUT L R	Sound output.
AV 3 L R VIDEO	Sound/picture input.
S-VHS	S-VHS picture signal input.
DC 12V	Connection socket for mains adapter (Amira 17).
▣	Mains socket (Amira 30).
PC INPUT	VGA connection for PC.
Ω	Headphone jack (3.5 mm ø jack plug).

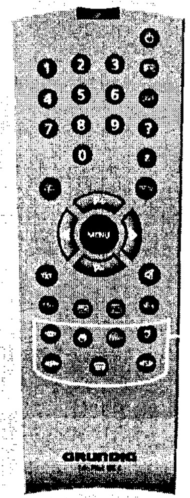


OVERVIEW

The remote control

⏻	Switches off the television set (stand-by).
⊡	Switches the picture format; switches to double character size in teletext mode.
Lock	Calls up the »FEATURES« menu.
?	Shows and hides the status display.
1...0	Switches the television on from stand-by mode. Selects channels directly.
z	Switches between two selected television channels (zap function).
-/--	Switches between single and double-digit preset channels.
TV/AV	Switches to the AV channel positions and back to the television channel last selected.
P+, P-	Switches the television on from standby. Selects stations step by step. Moves the cursor in the menus up and down.
MENU	Calls up the »MAIN MENU«.
◀ ▶	Adjusts the volume. Moves the cursor left/right.
TXT	Switches between teletext and TV modes.
🔇	Sound on/off (mute).
Mix	Teletext/TV picture mixed mode.
⊠	Updates a page in teletext mode.
⍰	Reveals answers in teletext mode.
Stop	Stops pages in teletext mode.

ENGLISH 7



OVERVIEW

👁	Calls up the »PICTURE« menu. Scrolls back a page in teletext mode.
⊙	Time on/off. Scrolls to the next page in teletext mode.
Timer	Calls up the »TIMER« menu. Selects the desired chapter in teletext mode.
?	Calls up the »SOUND« menu. Selects the desired topic in teletext mode.
⇥P⇤	Selects various picture settings.
▤	Switches to the PC channel position. Selects multiple pages in teletext mode.
⇥S⇤	Selects various sound settings.

8

Service- und Sonderfunktionen

Tastenfunktionen

MENU	Aufrufen des Dialog Centers
"rot"	Service Menü 1
"blau"	Service Menü 2
"grün"	Service Menü 3
P+/P–	Menü-Zeile (Menüpunkt) wählen
◀ / ▶	Wert ändern
TXT	Beenden des Service Mode

Service-Mode aktivieren

- Taste "**MENU**" (Hauptmenü) drücken.
- Zahlenfolge "8500" eingeben. Auf dem Bildschirm wird das Service Menü 1 angezeigt.
- Service Menüs 1 bis 3 mit den Tasten "rot", "blau" oder "grün" aufrufen.

Service-Mode beenden

- Taste "**TXT**" drücken.
  Die Software-Versionsnummer wird kurzzeitig angezeigt.

1. Grundeinstellwerte

Die Grundeinstellwerte im Service Mode sind in der Tabelle enthalten.

Service and Special Funktions

Functions of the buttons

MENU	Call up the Dialog Center
"red"	Call up the Service Menu 1
"blue"	Call up the Service Menu 2
"green"	Call up the Service Menu 3
P+/P–	Call up te dialogue line (point of menu)
◀ / ▶	Changing the settings in the Service Menu
TXT	Exit the Service Mode

Calling up the Service Mode

- Press button "**MENU**" (Main Menu).
- Enter the code number "8500". The Service Menu 1 is shown on the screen.
- Call up the Service Menu 1 to 3 with the buttons "red", "blue" or "green".

Exit the Service Mode

- Press button "**TXT**".
  The software version number is shown.

1. Basic Settings

The table shows all basic specific settings in the service mode.

Service Menü Service Menu	**Menüpunkt Point of Menu** P+ / P–	**Einstellung Adjustment** ◀ / ▶	**Hinweis Hint**	**AMIRA 30 LW 76-9401 TOP**
Service Menü 1 / Service Menu 1 **Taste "rot" / button "red"**	TUNER	PHILIPS-ME		x
		PHILIPS-MEPT		
		SAMSUNG-28A		
		SAMSUNG-27D		
	AGC	0...7		3
	STANDBY	YES	Netz-Ein –> Standby / Power on –> standby	x
		NO	Netz-Ein –> Programm 1 / Power on – programme 1	
	SWAP/ZAPP	SWAP		
		ZAPP		x
	TEXT	DEFAULT		
		FASTEXT	Fast-Text	
		TOPTEXT	TOP-Text	
		TOP&FAST	TOP & Fast-Text	x
	SECAM AUD	BY TUNER		x
		BY MSP		
	LANGUAGE	GROUP0	English, German, French, Italian, Spanish, Portuguese, Turkish, Svenska, Norwegian, Danish, Dutch, Suomi, Polish, Greek, Russian, Hebrew	x
		GROUP1		
Menü 2 / Menu 2 **Taste "blau" / button "blue"**	BG	YES	TV-Norm BG	x
		NO		
	DK	YES	TV-Norm DK – nur bei Ost-Europa / only for east europe "YES"	
		NO		x
	I	YES	TV-Norm I	
		NO		x
	L	YES	TV-Norm L – nur bei West-Europa / only for west europe "YES"	
		NO		x
	NICAM	YES	NICAM-Ton / Sound	x
		NO		
	HEADPHONE	YES	Kopfhörer vorhanden / Headphone available	x
		NO		
	CARR.MUTE	BY MSP		
		BY MICRO		x
	MONITOR	YES	VGA-Buchse vorhanden / VGA socket available	x
		NO		

Service Menü **Service Menu**	**Menüpunkt** **Point of Menu** P+ / P–	**Einstellung** **Adjustment** ◀ / ▶	**Hinweis** **Hint**	**AMIRA 30** **LW 76-9401 TOP**
Service Menü / Menu 3 Taste **"grün"** button **"green"**	R. CUT	0...255	Cut off-Wert "rot" / Cut off value "red"	1*
	G. CUT	0...255	Cut off-Wert "grün" / Cut off value "green"	3*
	B. CUT	0...255	Cut off-Wert "blau" / Cut off value "blue"	0*
	R. DRV	0...255	Weißabgleich "rot" / White balance "red"	0**
	G. DRV	0...255	Weißabgleich "grün" / White balance "green"	0**
	B. DRV	0...255	Weißabgleich "blau" / White balance "blue"	5**
	BACKLIGHT	0...4	Hintergrundbeleuchtung / Backlight: 0 = hell / bright 4 = dunkel / dark	0

* Wert gegebenenfalls so verändern, dass die dunklen Bildbereiche eines Grautreppentestbildes unbunt sind.

** Wert gegebenenfalls so verändern, dass die hellen Bildbereiche eines Grautreppentestbildes unbunt sind.

2. Austausch der Hauptplatte oder des U506

Nach dem Austausch der Hauptplatte oder des U506 sind Grundeinstellwerte im Service Mode entsprechend der Tabelle einzustellen.

3. Software-Versionsnummer

Die Software-Versionsnummer wird nach dem Beenden des Service Modes angezeigt, z.B.:

SL430WGC**04**
TEST:03 20/08/04

3. Programmsuchlauf

- Taste "**MENU**" (Hauptmenü) drücken.
- "SUCHLAUF / ABSTIMMUNG" mit den Tasten **P+** / **P–** anwählen und mit der Taste "**MENU**" bestätigen.
- "PROGRAMMSUCHLAUF" mit den Tasten **P+** / **P–** anwählen und mit der Taste "**MENU**" bestätigen.
- Land mit den Tasten **P+** / **P–**, ◀ / ▶ auswählen und mit der Taste "**MENU**" bestätigen.
  Das automatische Sendersuchsystem stoppt bei jedem empfangswürdigen Sender (AFC und Koinzidenz) und speichert automatisch die entsprechenden Senderdaten mit dem jeweiligen Standard. Danach wird der Suchlauf fortgesetzt.

Zum Abbrechen des Suchlaufes die Taste "**MENU**" drücken.

* If nesessary change the settings so that the dark part of the greyscale test pattern is achromatic.

** If nesessary change the settings so that the bright part of the greyscale test pattern is achromatic.

2. Change of Main Board or U506

After changing the Main Board or U506 all basic settings in the service mode must be done according to the table.

3. Software Version Number

The software version number is shown after ending the service mode, e.g.:

SL430WGC**04**
TEST:03 20/08/04

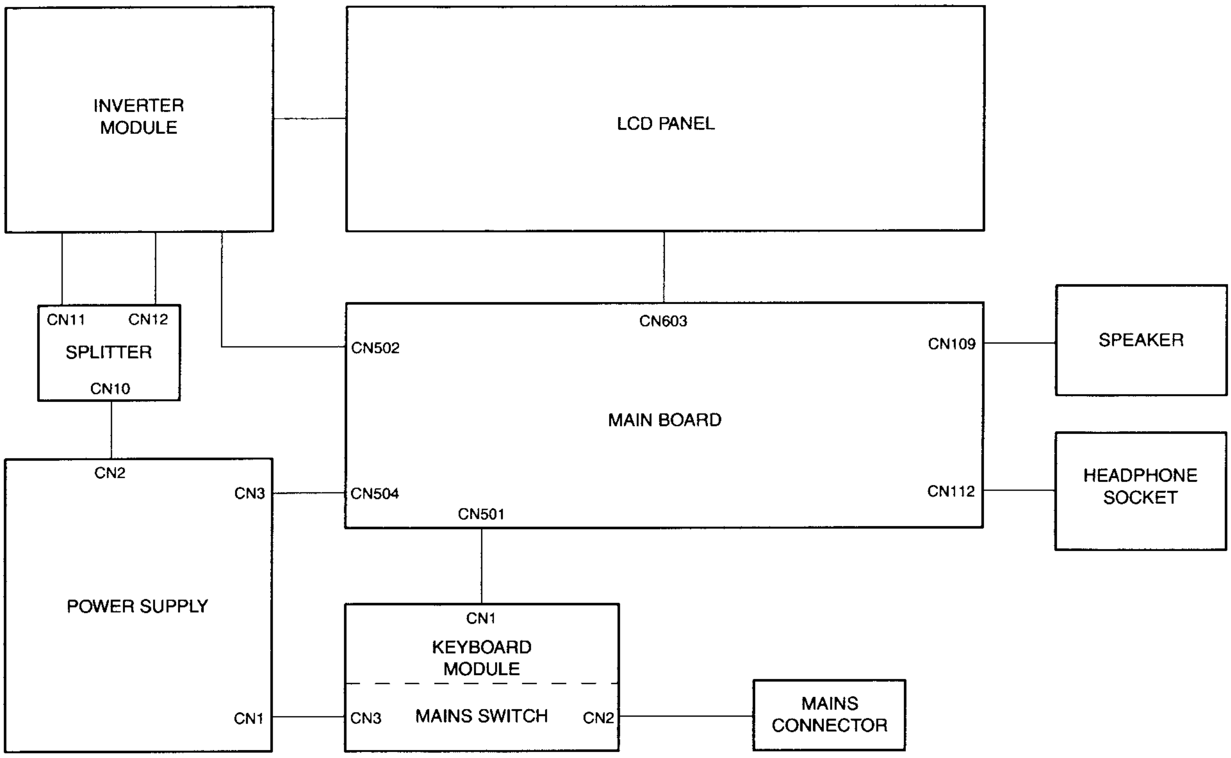
3. Programme Search

- Press button "**MENU**" (Main Menu).
- Select "SETUP" with the buttons **P+** / **P–** and confirm with button "**MENU**".
- Select "AUTOPROGRAM" with the buttons **P+** / **P–** and confirm with button "**MENU**".
- Select the Country with the buttons **P+** / **P–**, ◀ / ▶ and confirm with button "**MENU**".
  The autoprogram system stops at every station of acceptable reception quality (AFC and coincidence) and stores the station data and the respective standard automatically. The system then continues searching.

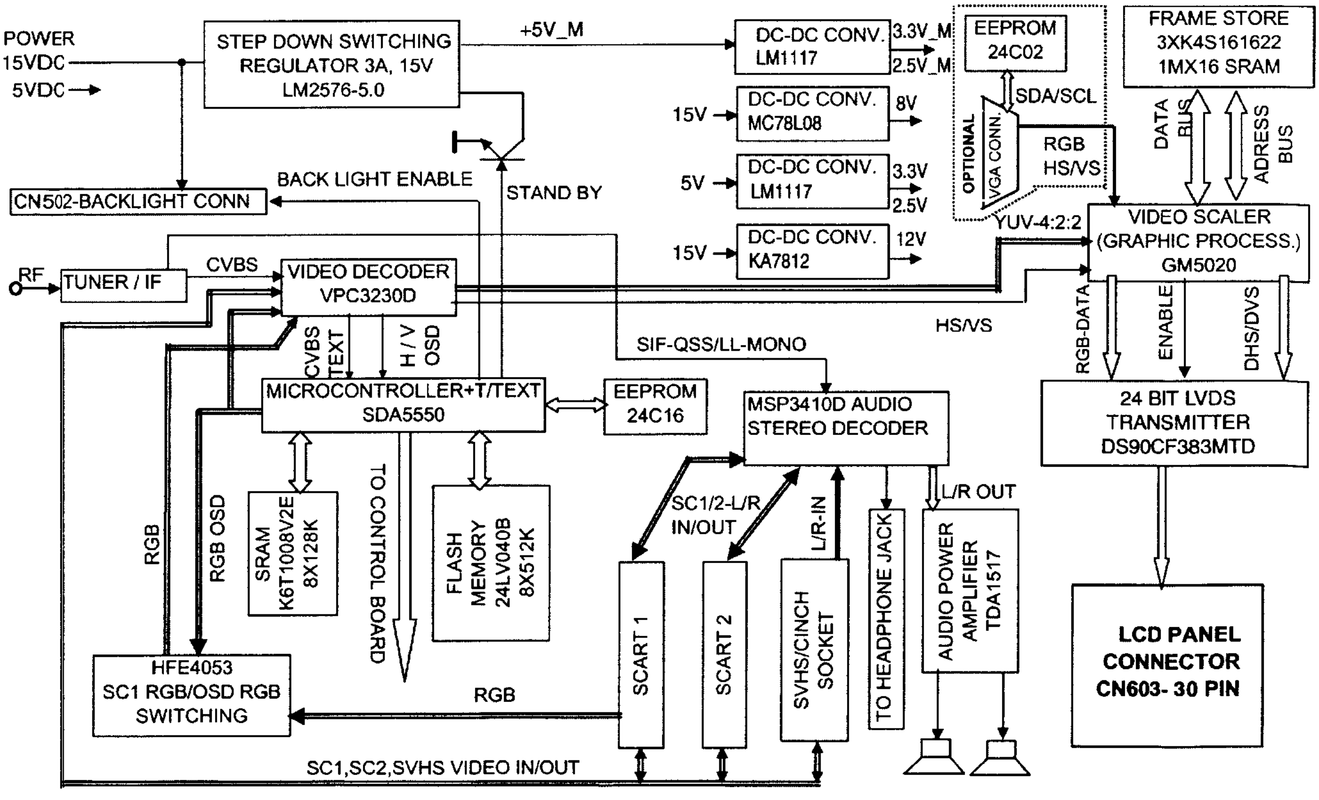
Pressing the "**MENU**" button stops the programme search.

Platinenabbildungen und Schaltpläne / Layout of the PCBs and Circuit Diagrams

Verdrahtungsplan / Wiring Diagram

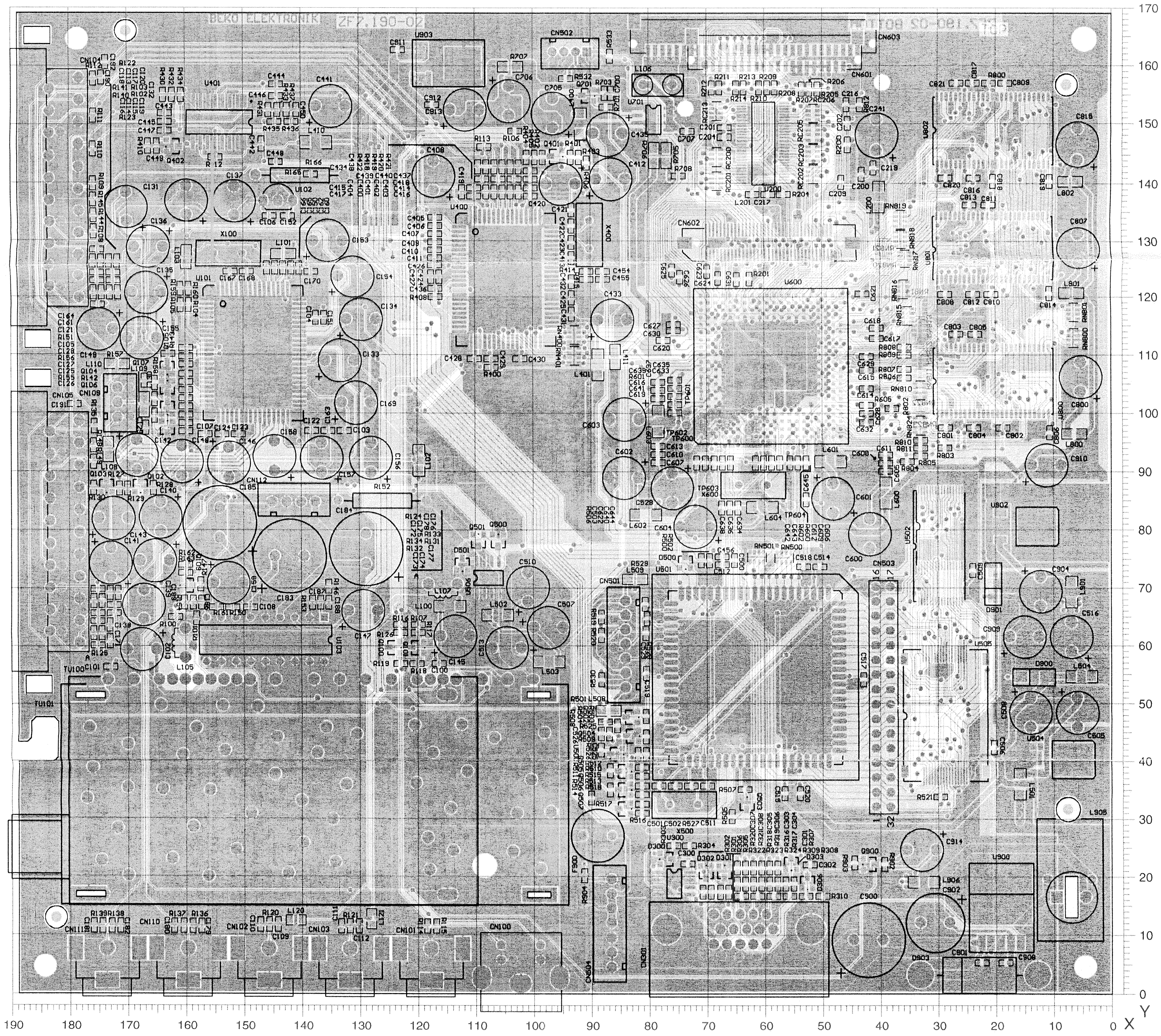

INVERTER MODULE
LCD PANEL
CN11
CN12
SPLITTER
CN10
CN603
CN502
CN109
SPEAKER
MAIN BOARD
CN2
CN3
CN504
CN501
CN112
HEADPHONE SOCKET
POWER SUPPLY
CN1
KEYBOARD MODULE
CN1
CN3
MAINS SWITCH
CN2
MAINS CONNECTOR

Blockschaltplan / Block Circuit Diagram


POWER
15VDC
5VDC
STEP DOWN SWITCHING REGULATOR 3A, 15V LM2576-5.0
+5V_M
DC-DC CONV. LM1117
3.3V_M
2.5V_M
EEPROM 24C02
FRAME STORE 3XK4S161622 1MX16 SRAM
15V
DC-DC CONV. MC78L08
8V
SDA/SCL
OPTIONAL
VGA CONN.
RGB HS/VS
DATA BUS
ADRESS BUS
CN502-BACKLIGHT CONN
BACK LIGHT ENABLE
STAND BY
5V
DC-DC CONV. LM1117
3.3V
2.5V
YUV-4:2:2
VIDEO SCALER (GRAPHIC PROCESS.) GM5020
15V
DC-DC CONV. KA7812
12V
RF
TUNER / IF
CVBS
VIDEO DECODER VPC3230D
HS/VS
CVBS TEXT
H / V OSD
SIF-QSS/LL-MONO
RGB-DATA
ENABLE
DHS/DVS
MICROCONTROLLER+T/TEXT SDA5550
EEPROM 24C16
MSP3410D AUDIO STEREO DECODER
24 BIT LVDS TRANSMITTER DS90CF383MTD
RGB
RGB OSD
SRAM K6T1008V2E 8X128K
TO CONTROL BOARD
FLASH MEMORY 24LV040B 8X512K
SC1/2-L/R IN/OUT
L/R-IN
L/R OUT
TO HEADPHONE JACK
AUDIO POWER AMPLIFIER TDA1517
SCART 1
SCART 2
SVHS/CINCH SOCKET
LCD PANEL CONNECTOR CN603- 30 PIN
HFE4053 SC1 RGB/OSD RGB SWITCHING
RGB
SC1,SC2,SVHS VIDEO IN/OUT

Hauptplatte / Main Board

Ansicht von der Bestückungsseite / View of Component Side


BEKO ELEKTRONIK
ZF7.190-02
Y
X
0
10
20
30
40
50
60
70
80
90
100
110
120
130
140
150
160
170
180
190

POS.	X	Y
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C153	136	130
C154	132	124
C155	168	113
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C157	137	93
C158	145	93
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C162	142	126
C163	136	98
C164	160	112
C165	145	126
C166	146	126
C167	153	125
C168	150	125
C169	131	102
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C178	174	70
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C182	172	12
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C626	75	124
C627	76	116
C628	43	100
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C644	66	92
C645	53	86
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C706	104	154
C707	73	148
C800	6	107
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C802	19	98
C803	27	114
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C805	24	114
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C807	6	129
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C809	19	157
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C811	22	137
C812	24	121
C813	25	137
C814	11	121
C815	6	147
C816	24	141
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C818	21	141
C819	11	141
C820	29	141
C821	27	157
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C901	23	6
C902	31	13
C904	13	70
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C911	122	163
C912	118	153
C913	112	152
C914	33	25
CN100	103	5
CN101	118	5
CN102	146	5
CN103	132	5
CN104	181	139
CN105	181	80
CN109	172	102
CN110	160	5
CN111	174	5
CN112	142	85
CN301	65	11
CN501	85	61
CN502	96	164
CN502A	96	162
CN503	40	52
CN504	90	5
CN601	59	164
CN602	60	130
CN603	62	165
D300	78	24
D301	68	21
D302	71	21
D303	56	23
D306	53	19
D500	74	75
D501	113	75
D900	14	55
D901	21	71
D903	23	4
F900	90	28
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L103	160	128
L105	161	61
L106	78	157
L107	126	69
L108	174	94
L109	168	102
L110	172	109
L120	142	13
L121	129	13
L200	41	138
L201	63	139
L400	92	151
L401	89	109
L410	138	147
L411	86	110
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L502	107	66
L503	98	58
L504	6	55
L508	88	49
L509	83	72
L600	39	87
L601	49	92
L602	81	83
L603	79	99
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L801	7	121
L802	7	141
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Q105	164	105
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Q107	164	108
Q109	160	71
Q401	96	145
Q402	163	147
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Q503	64	33
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Q506	85	35
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R105	161	119
R106	104	149
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R110	176	146
R111	176	152
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R115	117	12
R116	124	64
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R118	121	57
R119	124	57
R120	146	12
R121	132	12
R122	176	129
R123	176	119
R124	176	70
R125	176	61
R126	124	63
R127	172	88
R128	166	88
R129	171	88
R130	176	88
R131	173	66
R132	176	65
R133	173	68
R134	176	66
R135	176	98
R136	160	12
R137	161	12
R138	173	12
R139	175	12
R140	176	123
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R143	164	111
R144	176	135
R145	176	138
R146	136	71
R147	158	71
R148	176	95
R149	176	92
R150	152	67
R151	160	107
R152	127	85
R153	139	68
R154	161	68
R155	160	99
R156	160	103
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R162	161	75
R163	161	73
R165	139	142
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R200	46	147
R201	63	124
R204	57	139
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R210	61	157
R211	68	157
R212	69	157
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R400	108	108
R401	94	145
R402	99	145
R403	93	145
R404	102	145
R405	100	145
R406	91	144
R408	117	121
R410	167	147
R412	155	145
R414	91	125
R415	91	124
R418	107	143
R419	106	143
R420	104	143
R421	103	143
R422	109	143
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R432	163	156
R433	145	153
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R435	145	151
R436	142	151
R437	143	153
R500	72	75
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R502	70	75
R503	81	48
R504	86	47
R505	66	31
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R511	87	39
R512	82	39
R513	82	35
R514	87	35
R515	82	36
R516	82	31
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R519	89	66
R520	89	62
R521	30	34
R525	89	45
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R527	73	36
R528	81	65
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R533	87	162
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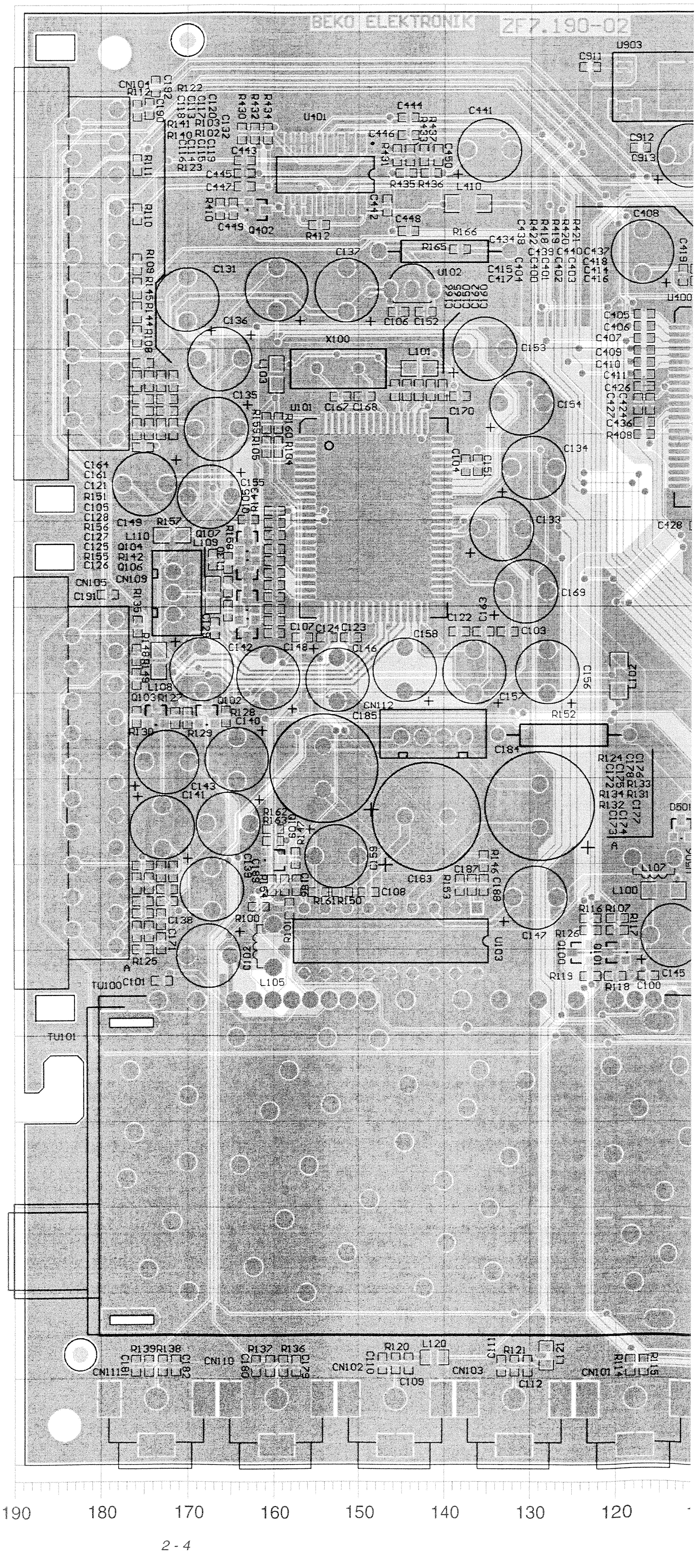
R601	76	105
R602	59	92
R605	43	102
R701	88	153
R703	88	156
R705	77	145
R706	80	145
R707	104	160
R708	75	142
R800	22	157
R802	38	101
R803	29	94
R804	35	91
R805	33	93
R806	36	106
R807	36	107
R808	36	112
R809	36	111
R810	33	96
R811	33	94
R812	43	153
R902	40	23
R903	45	23
R904	91	20
RC200	69	145
RC201	69	141
RC202	52	142
RC203	52	146
RC205	52	149
RC206	52	152
RC213	69	153
RN400	93	114
RN401	93	110
RN500	57	76
RN501	62	76
RN800	7	113
RN801	7	118
RN810	32	104
RN815	36	117
RN811_	32	106
RN812_	32	109
RN813_	32	114
RN814_	32	118
RN816	37	121
RN817	36	127
RN818	37	130
RN819	37	134
RN820_	39	125
RN821_	39	129
RN822_	32	102
RN823_	32	98
RN824	32	98
TU100	145	36
TU101	139	36
U101	149	111
U102	144	137
U103	147	61
U200	61	147
U300	76	19
U400	105	124
U401	155	151
U500	86	42
U501	62	55
U502	30	78
U504	10	41
U505	29	48
U506	108	72
U600	59	109
U701	79	151
U800	21	106
U801	21	129
U802	21	149
U900	20	13
U902	16	81
U903	161	115
X100	153	128
X400	91	131
X500	75	33
X600	62	88

Hauptplatte / Main Board Vergrößerte Ansicht von der Bestückungsseite / Enlarged view of Component Side


BEKO ELEKTRONIK
ZF7.190-02
U903
C911
C912
C913
U401
C444
C441
C446
C443
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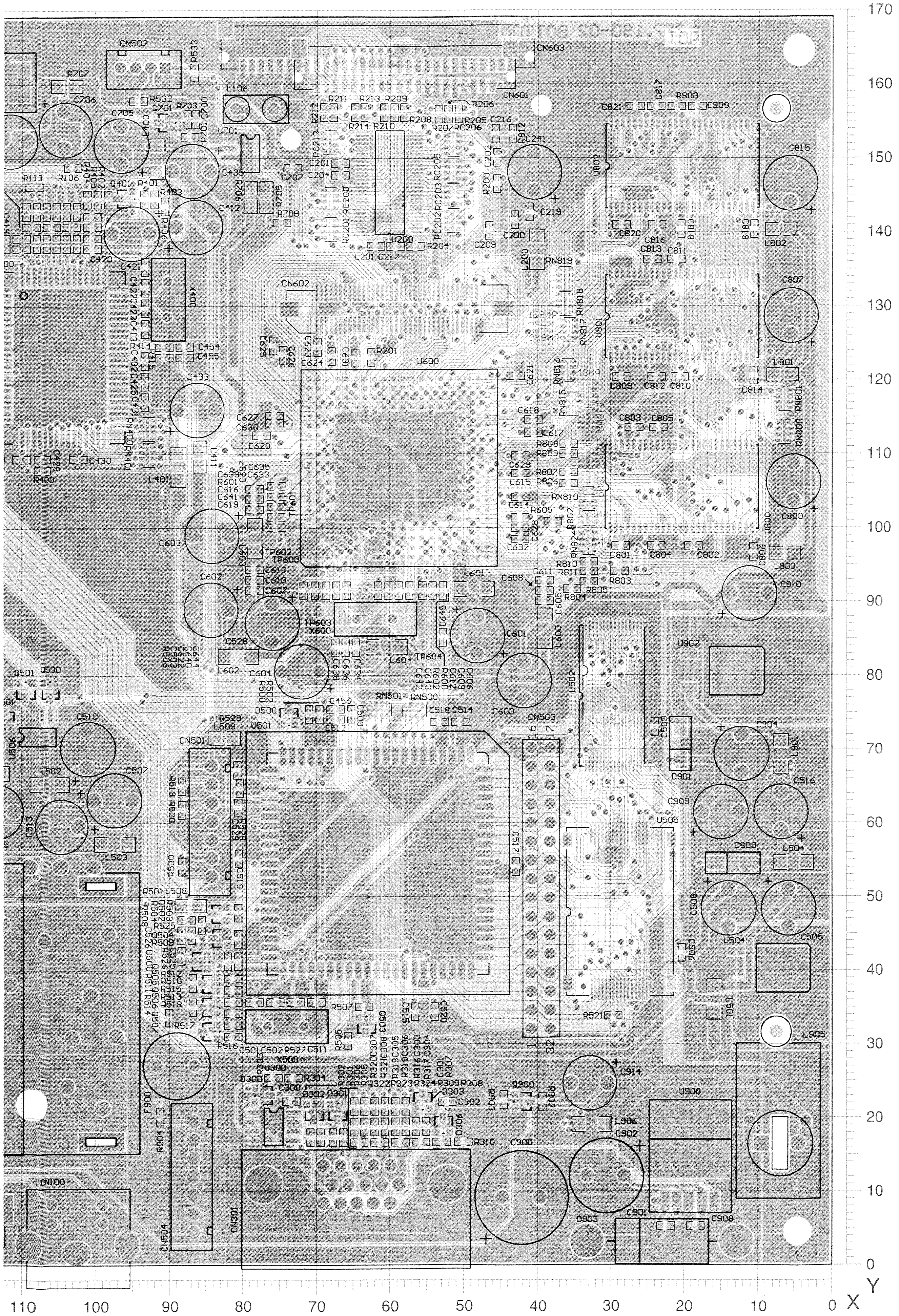
C447
R435 R436
L410
C442
C448
R412
Q402
C449
R410
R166
R165
C434
C408
C137
U102
C131
C136
X100
L101
C106 C152
C153
C154
C135
U101
C167 C168
C170
C134
C133
C169
C149
L110
Q107
L109
CN105
C191
CN109
C107 C124 C123
C122
C158
C103
C142
C148
C146
C156
C157
CN112
C185
R152
C184
C140
R129
R130
C143
C141
C159
C183
C187
C108
C147
R126
R119
C145
R118
C100
L100
L107
R116 R107
C138
R125
R100
L102
L105
U103
TU100
C101
TU101
CN104
R112
R122
R141 R103
R140 R102
R123
R111
R110
R109
C164
C161
C121
R151
C105
C128
R156
C127
C125
R155
C126
Q104
R142
Q106
R157
Q103 R127
Q102
R128
R162
R163
R161 R150
U400
C405
C406
C407
C409
C410
C411
C426
C436
R408
C428
D501
R124
R134 R131
R132
R139 R138
R137 R136
R120
L120
R121
CN111
CN110
CN102
C110
C109
CN103
C112
CN101
R114
190
180
170
160
150
140
130
120

Hauptplatte / Main Board Vergrößerte Ansicht von der Bestückungsseite / Enlarged view of Component Side


CN502
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CN601
CN602
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U601
U200
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U801
U802
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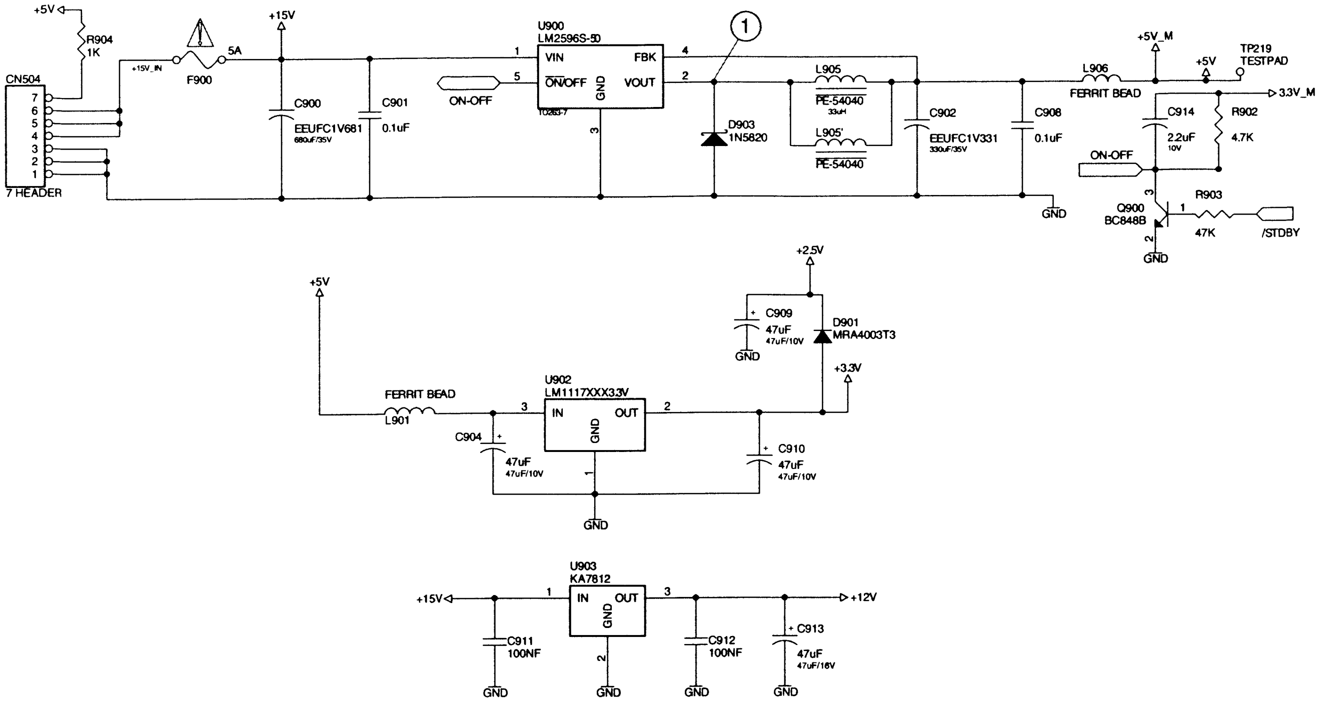
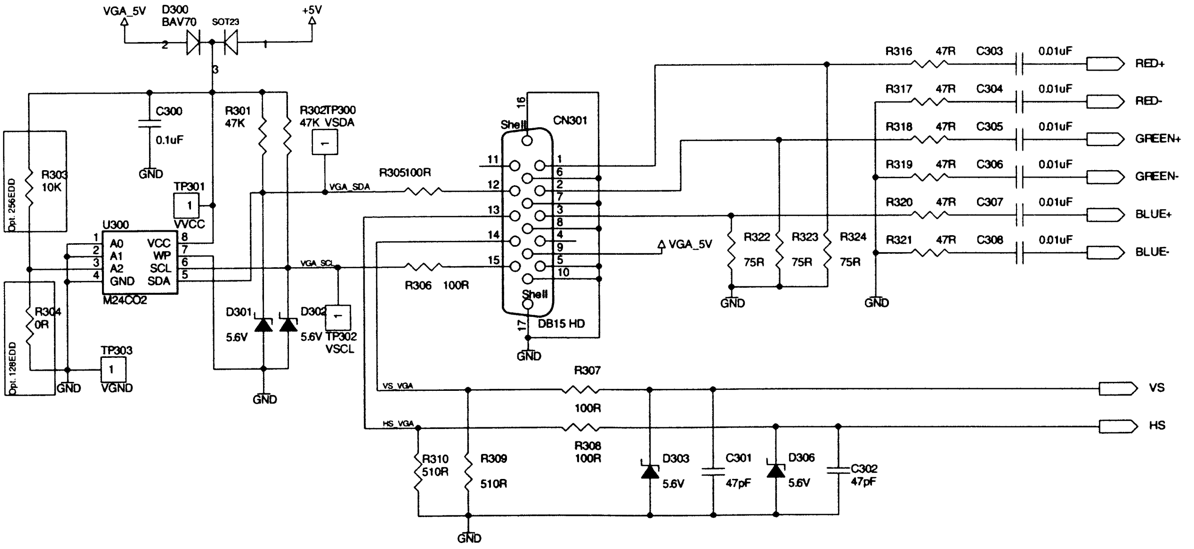
U902
U502
U505
U504
U900
U300
X400
X600
X500
CN501
CN503
CN301
CN504
CN100
L106
L800
L801
L802
L601
L602
L604
L401
L901
L904
L905
L906
C807
C815
C800
C910
C904
C909
C516
C505
C509
C900
C902
C914
C601
C600
C603
C602
C607
C433
C510
C507
170
160
150
140
130
120
110
100
90
80
70
60
50
40
30
20
10
0
Y
110
100
90
80
70
60
50
40
30
20
10
0
X

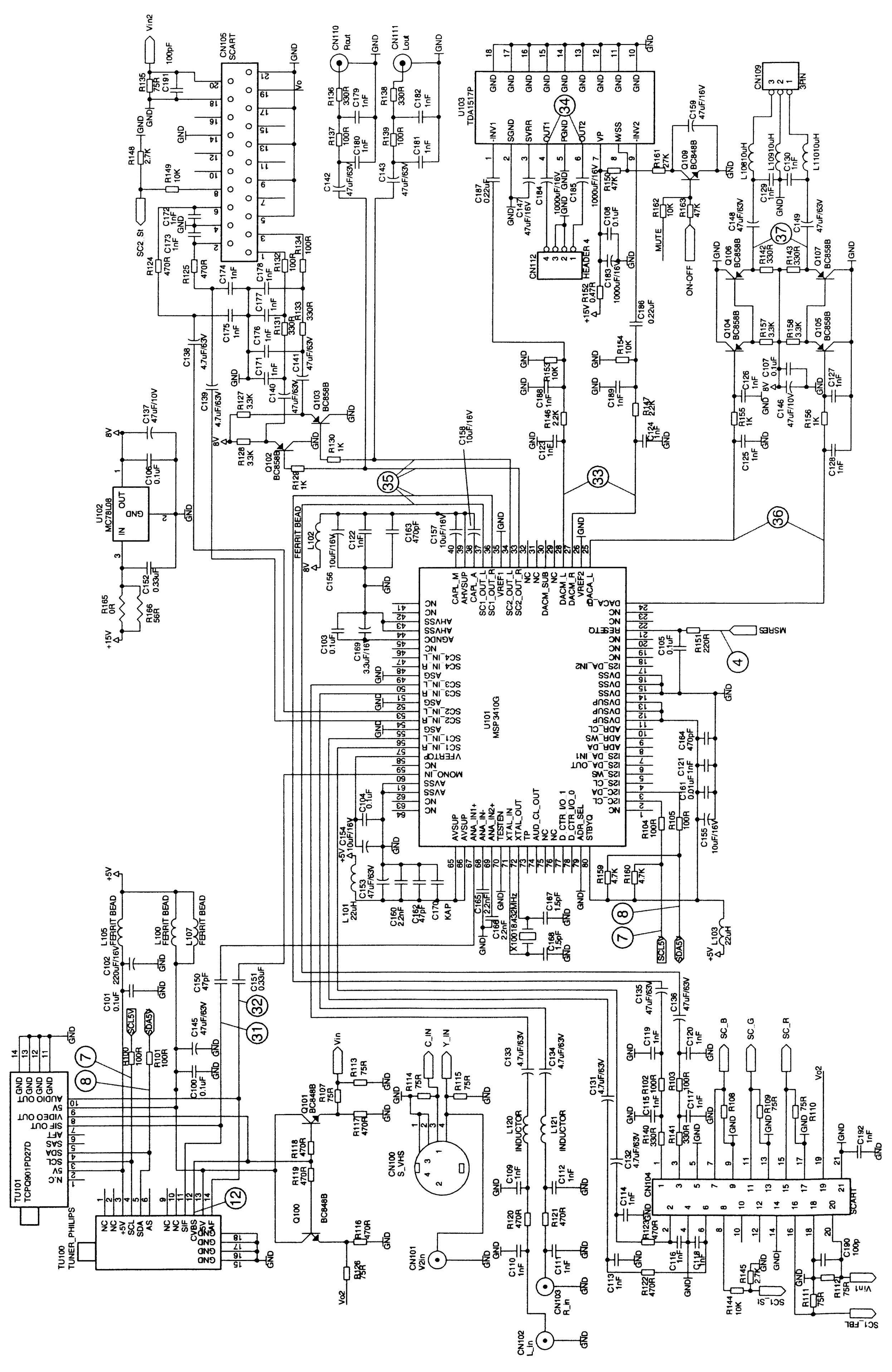
Hauptplatte – Netzteil / Main Board – Power Supply


+5V
R904
1K
CN504
7 HEADER
F900
5A
+15V_IN
+15V
C900
EEUFC1V681
680uF/35V
C901
0.1uF
U900
LM2596S-50
VIN
FBK
ON/OFF
VOUT
GND
ON-OFF
①
D903
1N5820
L905
PE-54040
33uH
L905'
PE-54040
C902
EEUFC1V331
330uF/35V
C908
0.1uF
+5V_M
L906
FERRIT BEAD
+5V
TP219
TESTPAD
3.3V_M
C914
2.2uF
10V
R902
4.7K
ON-OFF
GND
R903
47K
Q900
BC848B
/STDBY
+2.5V
C909
47uF
47uF/10V
D901
MRA4003T3
+3.3V
+5V
FERRIT BEAD
L901
U902
LM1117XXX3.3V
IN
OUT
C904
47uF
47uF/10V
C910
47uF
47uF/10V
GND
U903
KA7812
+15V
+12V
C911
100NF
C912
100NF
C913
47uF
47uF/16V
GND

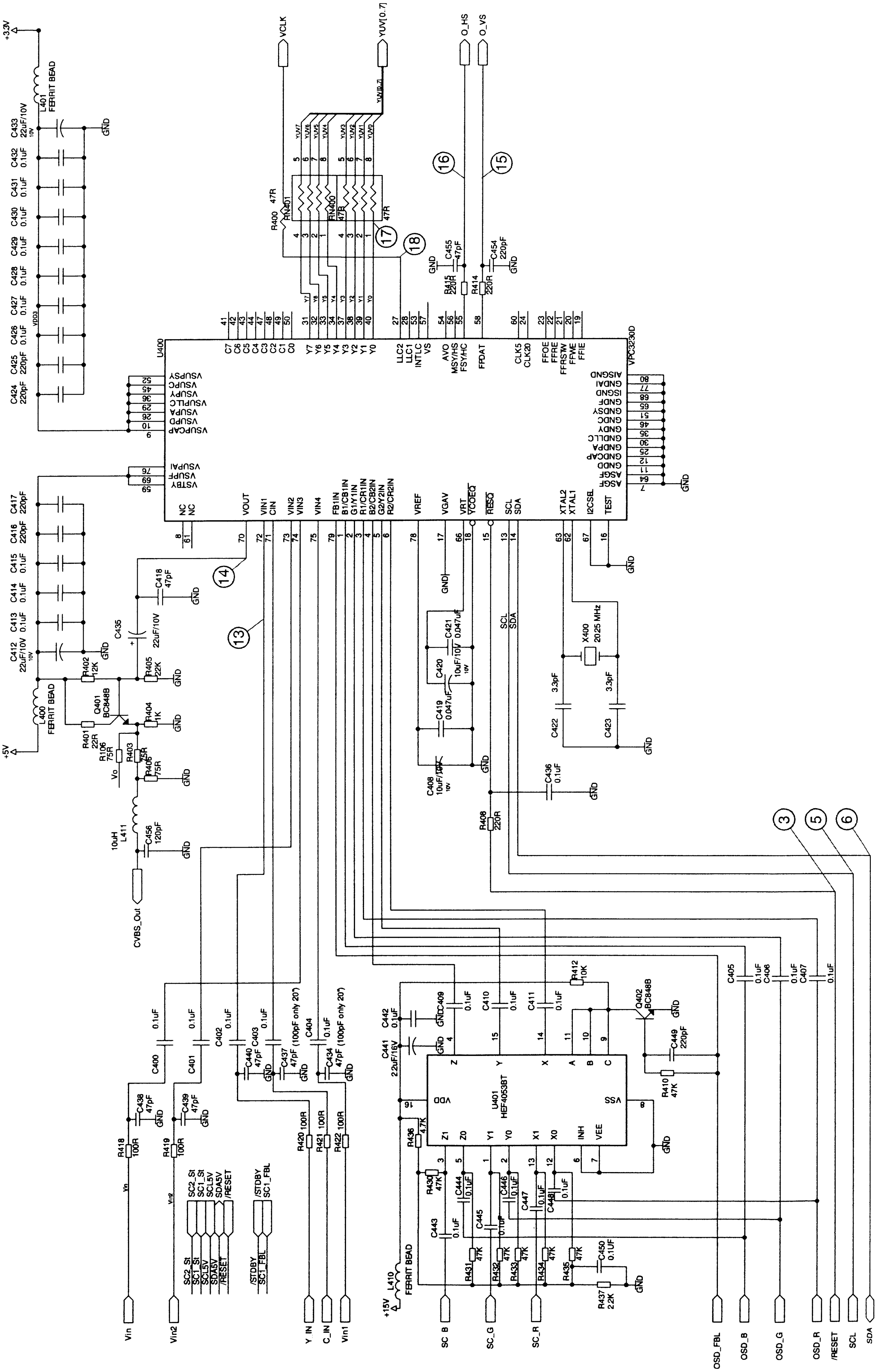
Hauptplatte – SVGA-Eingang / Main Board – SVGA Input


VGA_5V
D300
BAV70
SOT23
+5V
C300
0.1uF
R301
47K
R302
47K
TP300
VSDA
R303
10K
Opt. 256EDD
TP301
VVCC
U300
A0
A1
A2
GND
VCC
WP
SCL
SDA
M24C02
R304
0R
Opt. 128EDD
TP303
VGND
R305 100R
VGA_SDA
VGA_SCL
R306 100R
D301
5.6V
D302
5.6V
TP302
VSCL
CN301
Shell
DB15 HD
VGA_5V
R322
75R
R323
75R
R324
75R
R316 47R C303 0.01uF RED+
R317 47R C304 0.01uF RED-
R318 47R C305 0.01uF GREEN+
R319 47R C306 0.01uF GREEN-
R320 47R C307 0.01uF BLUE+
R321 47R C308 0.01uF BLUE-
R307
100R
VS_VGA
VS
HS_VGA
R308
100R
HS
R310
510R
R309
510R
D303
5.6V
C301
47pF
D306
5.6V
C302
47pF
GND

Hauptplatte / Main Board – IN/OUT


U101
MSP3410G
U103
TDA1517P
U102
MC78L08
TU101
TCPQ901PD27D
TU100
TUNER_PHILIPS
CN105
SCART
CN104
SCART
CN100
S_VHS
CN101
V2in
CN102
L_in
CN103
R_in
CN110
Rout
CN111
Lout
CN109
3PIN
CN112
HEADER 4
Q100
BC848B
Q101
BC848B
Q102
BC858B
Q103
BC858B
Q104
BC858B
Q105
BC858B
Q106
BC858B
Q107
BC858B
Q109
BC848B
X100
18.432MHz
L100
FERRIT BEAD
L105
FERRIT BEAD
L107
FERRIT BEAD
L102
FERRIT BEAD
L120
INDUCTOR
L121
INDUCTOR
MUTE
ON-OFF
MSRES
SCL5V
SDA5V
SC_B
SC_G
SC_R
SC1_FBL
SC1_SI
V_in1
Vo2
Vin
C_IN
Y_IN
Vin2
SC2_SI
+15V
+5V
8V
GND
①
⑦
⑧
④
⑫
㉛
㉜
㉝
㉞
㉟
㊱
㊲

Hauptplatte Video-Konverter / Main Board – Video Converter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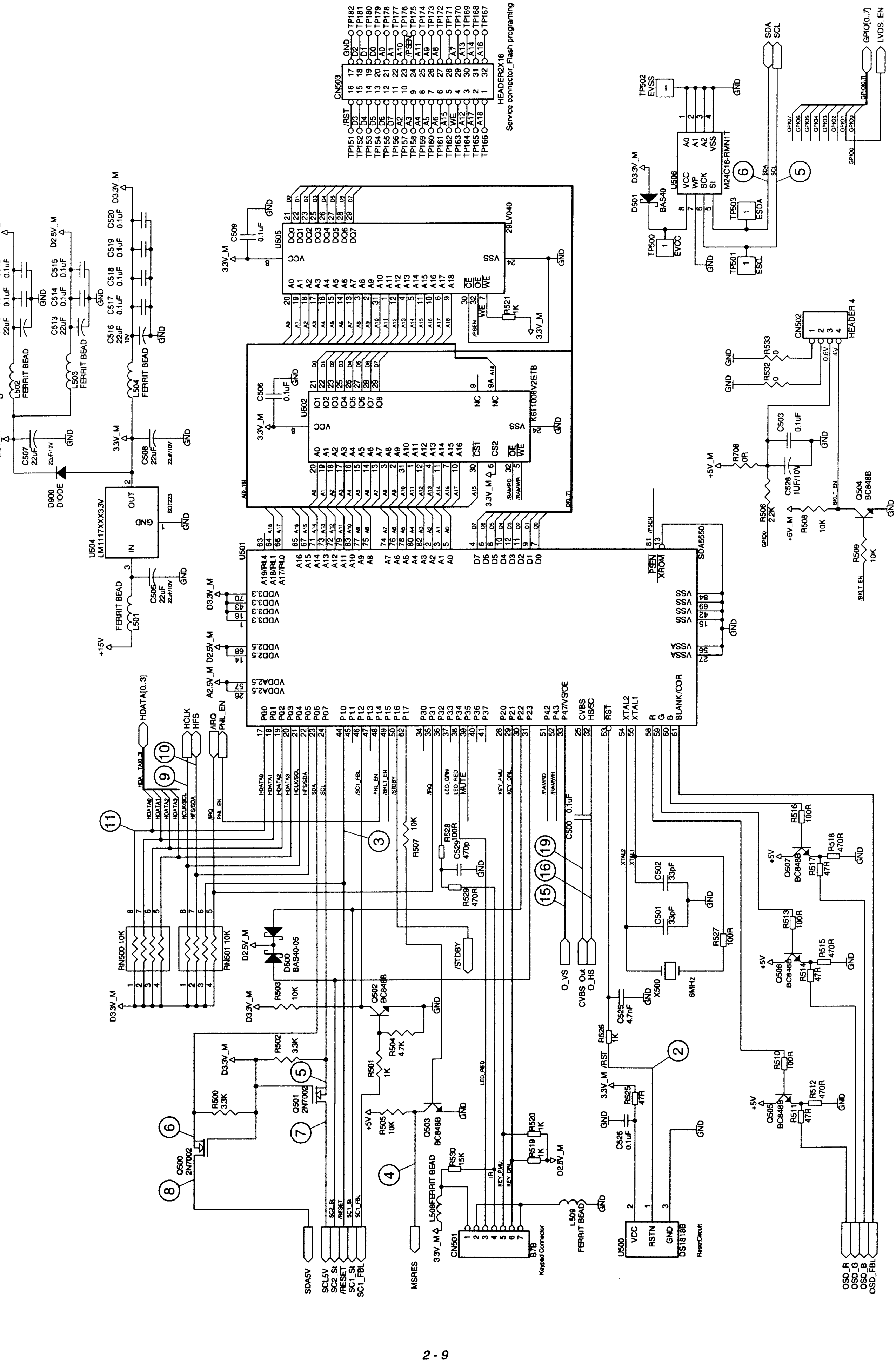
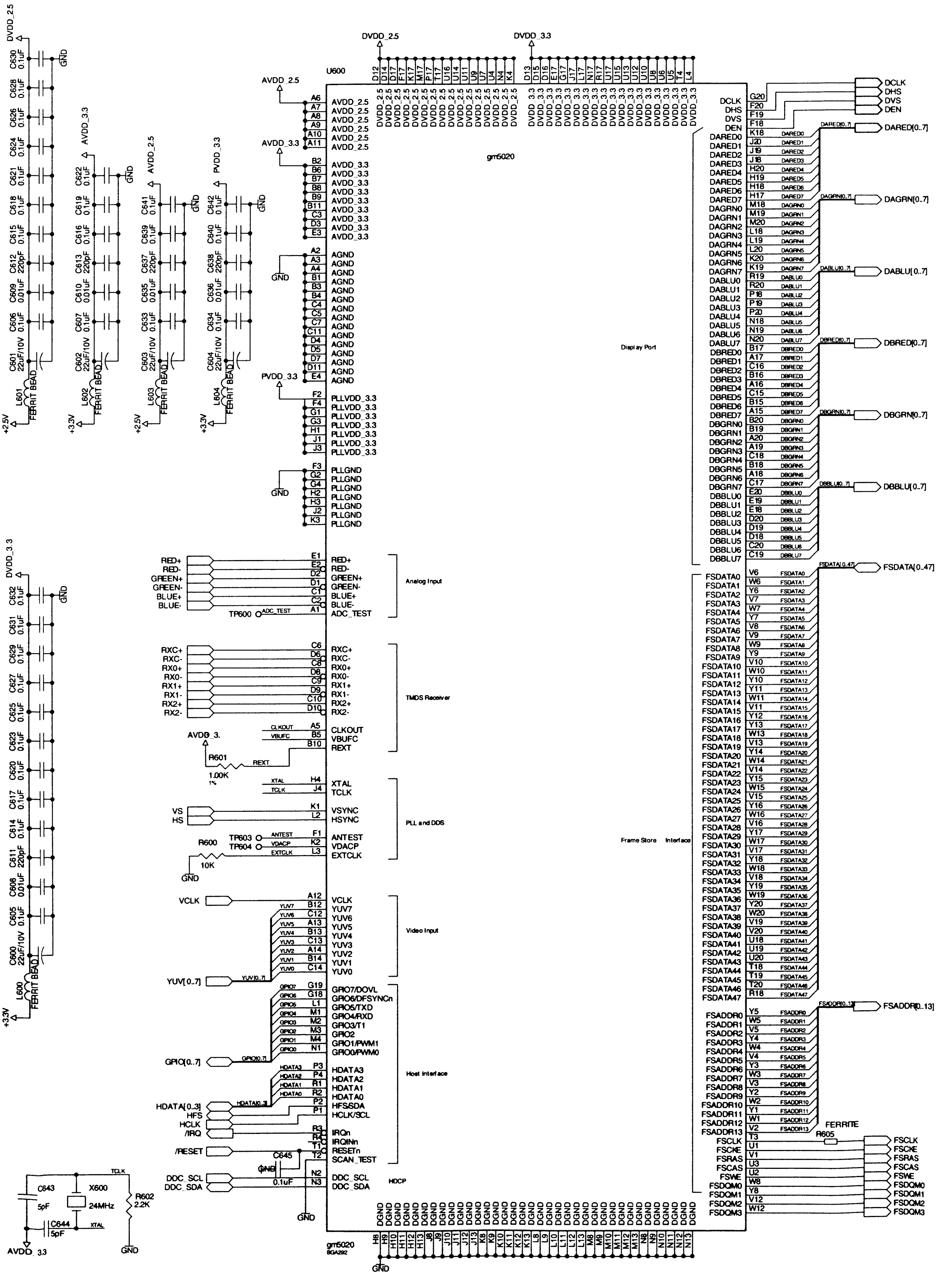
VPC3230D
U401
HEF4053BT
X400
2025 MHz
Q401
BC848B
Q402
BC848B
RN400 47R
RN401
R400 47R
L400 FERRIT BEAD
L401 FERRIT BEAD
L410 FERRIT BEAD
L411 10uH
+3,3V
+5V
+15V
GND
VCLK
YUV[0..7]
O_HS
O_VS
CVBS_Out
Vin
Vin2
Y IN
C_IN
Vin1
SC_B
SC_G
SC_R
OSD_FBL
OSD_B
OSD_G
OSD_R
/RESET
SCL
SDA
SC2_St
SC1_St
SC1_5V
SDA5V
/RESET
/STDBY
SC1_FBL
C424 220pF
C425 220pF
C426 0.1uF
C427 0.1uF
C428 0.1uF
C429 0.1uF
C430 0.1uF
C431 0.1uF
C432 0.1uF
C433 22uF/10V
C412 22uF/10V
C413 0.1uF
C414 0.1uF
C415 0.1uF
C416 220pF
C417 220pF
C418 47pF
C435 22uF/10V
C455 47pF
C454 220pF
R415 220R
R414 220R
R401 22R
R402 12K
R403 75R
R404 1K
R405 22K
R406 75R
R106 75R
C456 120pF
C419 0.047uF
C420 10uF/10V
C421 0.047uF
C408 10uF/10V
C422 3.3pF
C423 3.3pF
C436 0.1uF
R408 220R
C400 0.1uF
C401 0.1uF
C402 0.1uF
C403 0.1uF
C404 0.1uF
C437 47pF (100pF only 20")
C434 47pF (100pF only 20")
C438 47pF
C439 47pF
C440 47pF
R418 100R
R419 100R
R420 100R
R421 100R
R422 100R
C441 22uF/16V
C442 0.1uF
C409 0.1uF
C410 0.1uF
C411 0.1uF
R412 10K
C449 220pF
R410 47K
R436 4.7K
R430 47K
C443 0.1uF
C444 0.1uF
C445 0.1uF
C446 0.1uF
C447 0.1uF
C448 0.1uF
R431 47K
R432 47K
R433 47K
R434 47K
R435 47K
C450 0.1UF
R437 2.2K
C405 0.1uF
C406 0.1uF
C407 0.1uF
③
⑤
⑥
⑬
⑭
⑮
⑯
⑰
⑱

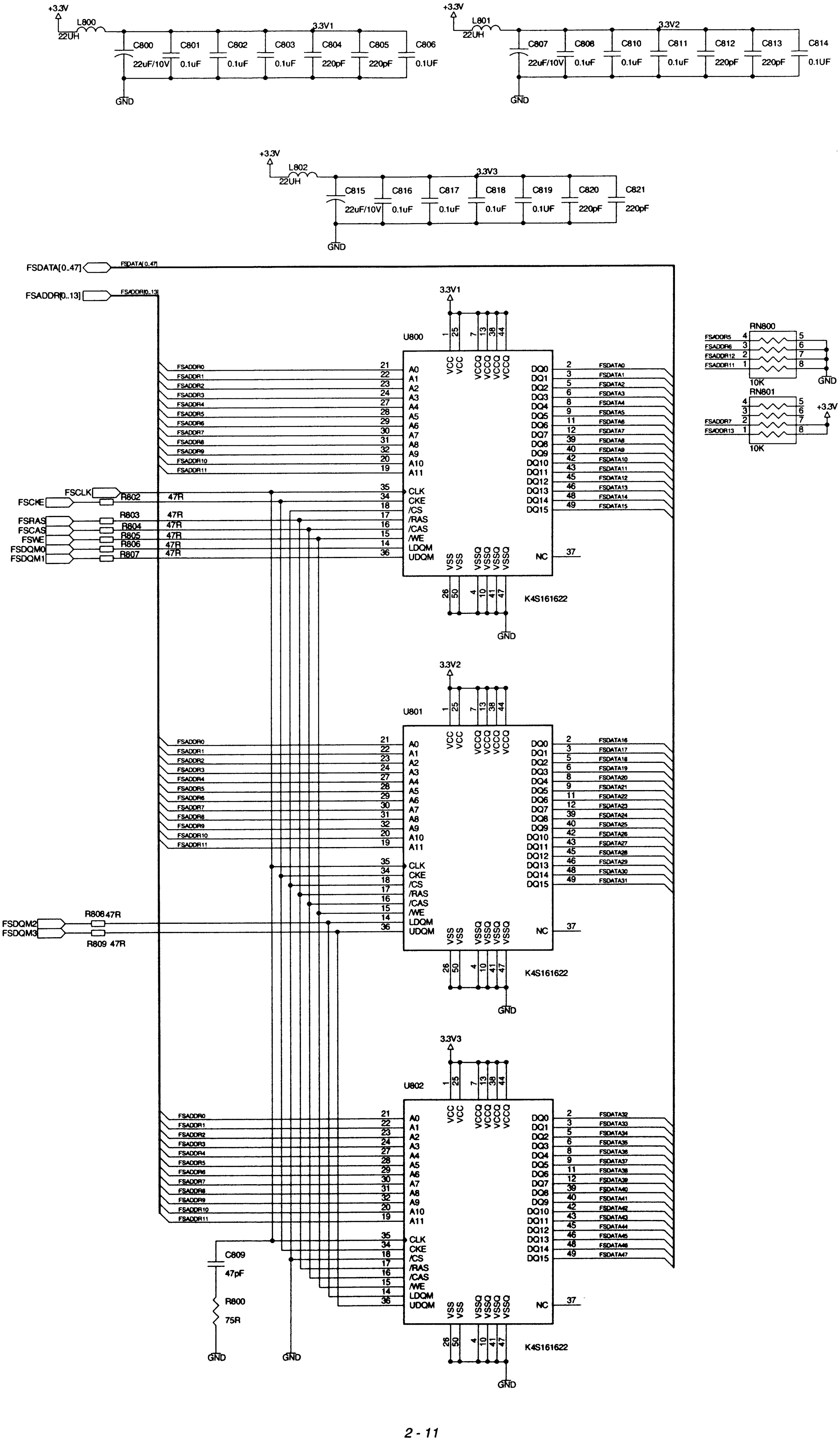
Hauptplatte – Prozessor / Main Board – Processor


U501
SDA5550
U502
K6T1008V2ETB
U505
29LV040
U504
LM1117XXX33V
SOT223
U506
M24C16-RMN1T
U500
DS1818B
ResetCircuit
CN503
HEADER2X16
Service connector_Flash programing
CN502
HEADER 4
CN501
B7B
Keypad Connector
X500
6MHz
D900
DIODE
D500
BAS40-05
D501
BAS40
Q500
2N7002
Q501
2N7002
Q502
BC848B
Q503
BC848B
Q504
BC848B
Q505
BC848B
Q506
BC848B
Q507
BC848B
RN500 10K
RN501 10K
L501
FERRIT BEAD
L502
FERRIT BEAD
L503
FERRIT BEAD
L504
FERRIT BEAD
L508
FERRIT BEAD
L509
FERRIT BEAD
TP500
EVCC
TP501
ESCL
TP502
EVSS
TP503
ESDA
+15V
+5V
3.3V_M
2.5V_M
D3.3V_M
D2.5V_M
A2.5V_M
GND
HDATA[0..3]
HCLK
HFS
/IRQ
PNL_EN
/STDBY
O_VS
CVBS Out
O_HS
SDA5V
SCL5V
SC2_SI
/RESET
SC1_SI
SC1_FBL
MSRES
OSD_R
OSD_G
OSD_B
OSD_FBL
SDA
SCL
GPIO[0..7]
LVDS_EN
①
②
③
④
⑤
⑥
⑦
⑧
⑨
⑩
⑪
⑮
⑯
⑲

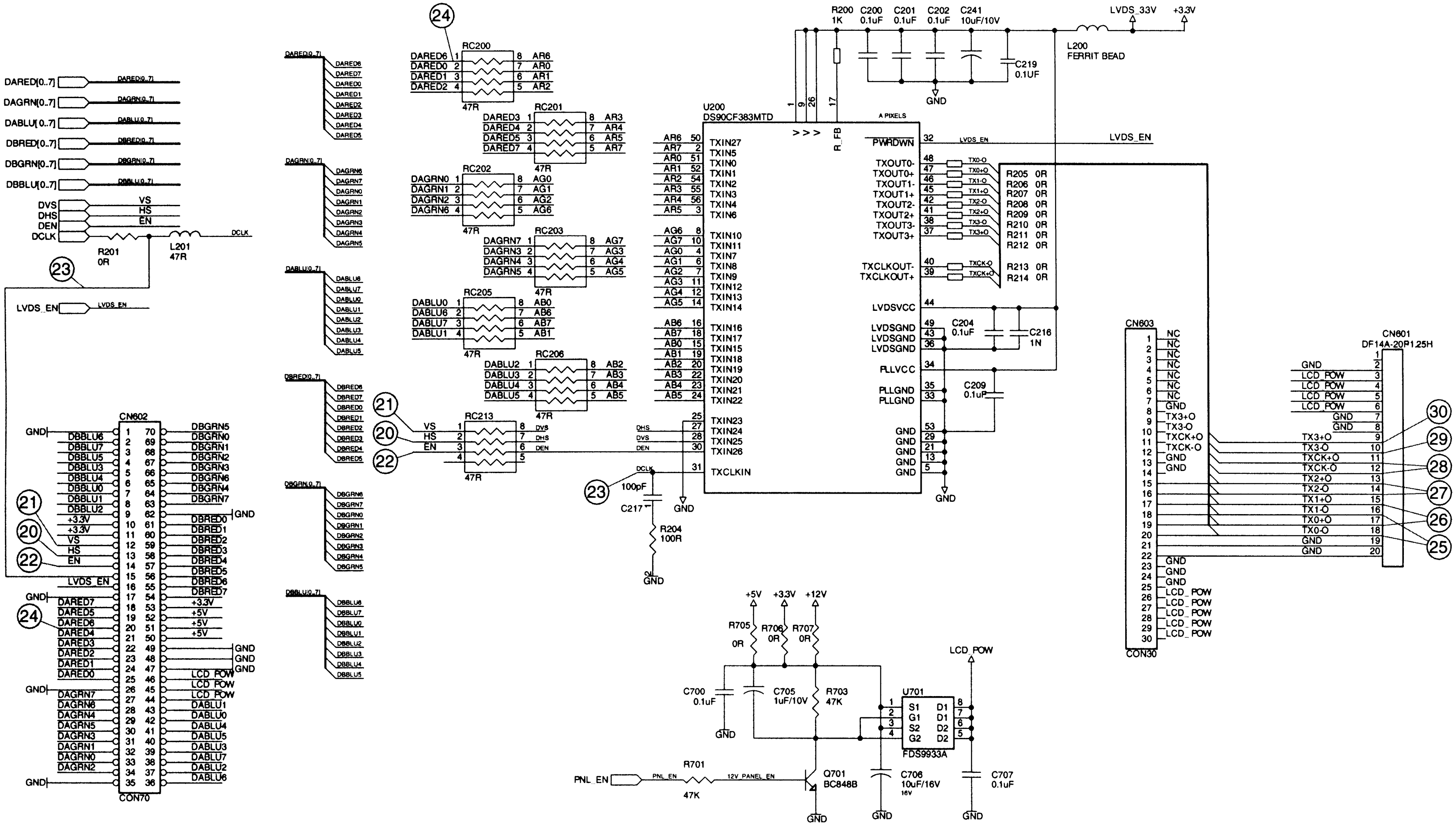
Hauptplatte / Main Board – Scaler


U600
gm5020
gm5020 BGA292
DVDD_2.5
DVDD_3.3
AVDD_2.5
AVDD_3.3
PVDD_3.3
AVDD 2.5
AVDD 3.3
PVDD 3.3
+2.5V
+3.3V
GND
C630 0.1uF
C628 0.1uF
C626 0.1uF
C624 0.1uF
C621 0.1uF
C618 0.1uF
C615 0.1uF
C612 220pF
C609 0.01uF
C606 0.1uF
C601 22uF/10V
L601 FERRIT BEAD
C622 0.1uF
C619 0.1uF
C616 0.1uF
C613 220pF
C610 0.01uF
C607 0.1uF
C602 22uF/10V
L602 FERRIT BEAD
C641 0.1uF
C639 0.1uF
C637 220pF
C635 0.01uF
C633 0.1uF
C603 22uF/10V
L603 FERRIT BEAD
C642 0.1uF
C640 0.1uF
C638 220pF
C636 0.01uF
C634 0.1uF
C604 22uF/10V
L604 FERRIT BEAD
DVDD_3.3
C632 0.1uF
C631 0.1uF
C629 0.1uF
C627 0.1uF
C625 0.1uF
C623 0.1uF
C620 0.1uF
C617 0.1uF
C614 0.1uF
C611 220pF
C608 0.01uF
C605 0.1uF
C600 22uF/10V
L600 FERRIT BEAD
AVDD 2.5 (A6, A7, A8, A9, A10, A11)
AVDD 3.3 (B2, B6, B7, B8, B9, B11, C3, D3, E3)
AGND (A2, A3, A4, B1, B3, B4, C4, C5, C7, C11, D4, D5, D7, D11, E4)
PLLVDD 3.3 (F2, F4, G1, G3, H1, J1, J3)
PLLGND (F3, G2, G4, H2, H3, J2, K3)
DVDD 2.5 (D12, D14, D17, F17, K17, M17, P17, T17, U16, U14, U11, U9, U7, U4, N4, K4)
DVDD 3.3 (D13, D15, D16, E17, G17, J17, L17, N17, R17, U17, U15, U13, U12, U10, U8, U6, U5, T4, L4)
DGND (H8, H9, H10, H11, H12, H13, J8, J9, J10, J11, J12, J13, K8, K9, K10, K11, K12, K13, L8, L9, L10, L11, L12, L13, M8, M9, M10, M11, M12, M13, N8, N9, N10, N11, N12, N13)
RED+ E1
RED- E2
GREEN+ D2
GREEN- D1
BLUE+ C1
BLUE- C2
ADC_TEST A1
TP600
Analog Input
RXC+ C6
RXC- D6
RX0+ C8
RX0- D8
RX1+ C9
RX1- D9
RX2+ C10
RX2- D10
CLKOUT A5
VBUFC B5
REXT B10
AVDD 3.3
R601 1.00K 1%
TMDS Receiver
XTAL H4
TCLK J4
VSYNC K1
HSYNC L2
VS
HS
ANTEST F1
VDACP K2
EXTCLK L3
TP603
TP604
R600 10K
PLL and DDS
VCLK A12
YUV7 B12
YUV6 C12
YUV5 A13
YUV4 B13
YUV3 C13
YUV2 A14
YUV1 B14
YUV0 C14
YUV[0..7]
Video Input
GPIO7/DOVL G19
GPIO6/DFSYNCn G18
GPIO5/TXD L1
GPIO4/RXD M1
GPIO3/T1 M2
GPIO2 M3
GPIO1/PWM1 M4
GPIO0/PWM0 N1
GPIO[0..7]
HDATA3 P3
HDATA2 P4
HDATA1 R1
HDATA0 R2
HFS/SDA P2
HCLK/SCL P1
IRQn R3
IRQINn R4
RESETn T1
SCAN_TEST T2
HDATA[0..3]
HFS
HCLK
/IRQ
/RESET
C645 0.1uF
DDC_SCL N2
DDC_SDA N3
DDC SCL
DDC SDA
Host Interface
HDCP
C643 5pF
X600 24MHz
C644 5pF
R602 2.2K
TCLK
XTAL
AVDD 3.3
DCLK G20
DHS F20
DVS F19
DEN F18
DARED0 K18
DARED1 J20
DARED2 J19
DARED3 J18
DARED4 H20
DARED5 H19
DARED6 H18
DARED7 H17
DAGRN0 M18
DAGRN1 M19
DAGRN2 M20
DAGRN3 L18
DAGRN4 L19
DAGRN5 L20
DAGRN6 K20
DAGRN7 K19
DABLU0 R19
DABLU1 R20
DABLU2 P18
DABLU3 P19
DABLU4 P20
DABLU5 N18
DABLU6 N19
DABLU7 N20
DBRED0 B17
DBRED1 A17
DBRED2 C16
DBRED3 B16
DBRED4 A16
DBRED5 C15
DBRED6 B15
DBRED7 A15
DBGRN0 B20
DBGRN1 B19
DBGRN2 A20
DBGRN3 A19
DBGRN4 C18
DBGRN5 B18
DBGRN6 A18
DBGRN7 C17
DBBLU0 E20
DBBLU1 E19
DBBLU2 E18
DBBLU3 D20
DBBLU4 D19
DBBLU5 D18
DBBLU6 C20
DBBLU7 C19
Display Port
DCLK
DHS
DVS
DEN
DARED[0..7]
DAGRN[0..7]
DABLU[0..7]
DBRED[0..7]
DBGRN[0..7]
DBBLU[0..7]
FSDATA0 V6
FSDATA1 W6
FSDATA2 Y6
FSDATA3 V7
FSDATA4 W7
FSDATA5 Y7
FSDATA6 V8
FSDATA7 V9
FSDATA8 W9
FSDATA9 Y9
FSDATA10 V10
FSDATA11 W10
FSDATA12 Y10
FSDATA13 Y11
FSDATA14 W11
FSDATA15 V11
FSDATA16 Y12
FSDATA17 Y13
FSDATA18 W13
FSDATA19 V13
FSDATA20 Y14
FSDATA21 W14
FSDATA22 V14
FSDATA23 Y15
FSDATA24 W15
FSDATA25 V15
FSDATA26 Y16
FSDATA27 W16
FSDATA28 V16
FSDATA29 Y17
FSDATA30 W17
FSDATA31 V17
FSDATA32 Y18
FSDATA33 W18
FSDATA34 V18
FSDATA35 Y19
FSDATA36 W19
FSDATA37 Y20
FSDATA38 W20
FSDATA39 V19
FSDATA40 V20
FSDATA41 U18
FSDATA42 U19
FSDATA43 U20
FSDATA44 T18
FSDATA45 T19
FSDATA46 T20
FSDATA47 R18
FSDATA[0..47]
FSADDR0 Y5
FSADDR1 W5
FSADDR2 V5
FSADDR3 Y4
FSADDR4 W4
FSADDR5 V4
FSADDR6 Y3
FSADDR7 W3
FSADDR8 V3
FSADDR9 Y2
FSADDR10 W2
FSADDR11 Y1
FSADDR12 W1
FSADDR13 V2
FSADDR[0..13]
FSCLK T3
FSCKE U1
FSRAS V1
FSCAS U3
FSWE U2
FSDQM0 W8
FSDQM1 Y8
FSDQM2 V12
FSDQM3 W12
FERRITE
R605
FSCLK
FSCKE
FSRAS
FSCAS
FSWE
FSDQM0
FSDQM1
FSDQM2
FSDQM3
Frame Store Interface

Hauptplatte – Speicher / Main Board – Memory

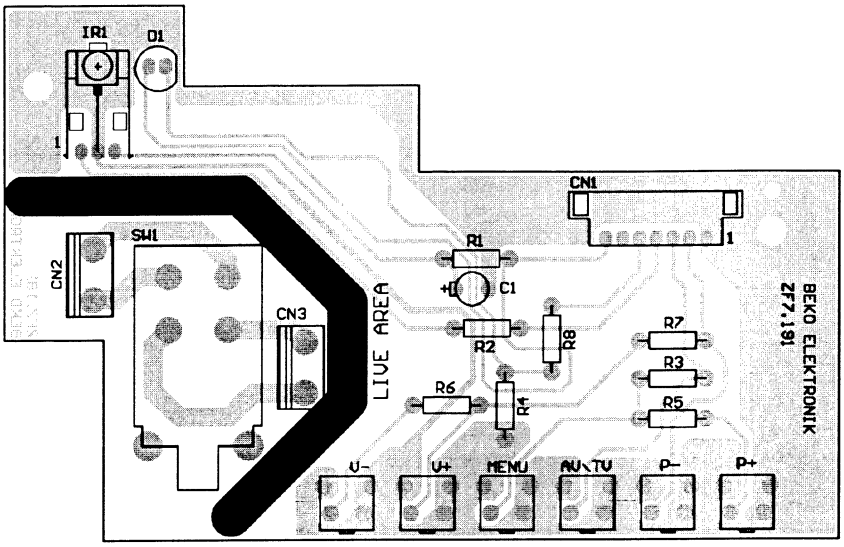

+3.3V
L800
22UH
3.3V1
C800
22uF/10V
C801
0.1uF
C802
0.1uF
C803
0.1uF
C804
220pF
C805
220pF
C806
0.1UF
GND
+3.3V
L801
22UH
3.3V2
C807
22uF/10V
C808
0.1uF
C810
0.1uF
C811
0.1uF
C812
220pF
C813
220pF
C814
0.1UF
GND
+3.3V
L802
22UH
3.3V3
C815
22uF/10V
C816
0.1uF
C817
0.1uF
C818
0.1uF
C819
0.1UF
C820
220pF
C821
220pF
GND
FSDATA[0..47]
FSADDR[0..13]
FSCLK
FSCKE
FSRAS
FSCAS
FSWE
FSDQM0
FSDQM1
R802 47R
R803 47R
R804 47R
R805 47R
R806 47R
R807 47R
U800
U801
U802
K4S161622
A0
A1
A2
A3
A4
A5
A6
A7
A8
A9
A10
A11
CLK
CKE
/CS
/RAS
/CAS
/WE
LDQM
UDQM
VCC
VSS
VCCQ
VSSQ
DQ0
DQ1
DQ2
DQ3
DQ4
DQ5
DQ6
DQ7
DQ8
DQ9
DQ10
DQ11
DQ12
DQ13
DQ14
DQ15
NC
37
FSADDR0
FSADDR1
FSADDR2
FSADDR3
FSADDR4
FSADDR5
FSADDR6
FSADDR7
FSADDR8
FSADDR9
FSADDR10
FSADDR11
FSDATA0 … FSDATA15
FSDATA16 … FSDATA31
FSDATA32 … FSDATA47
FSDQM2
FSDQM3
R808 47R
R809 47R
C809
47pF
R800
75R
GND
RN800
FSADDR5
FSADDR6
FSADDR12
FSADDR11
10K
GND
RN801
FSADDR7
FSADDR13
10K
+3.3V

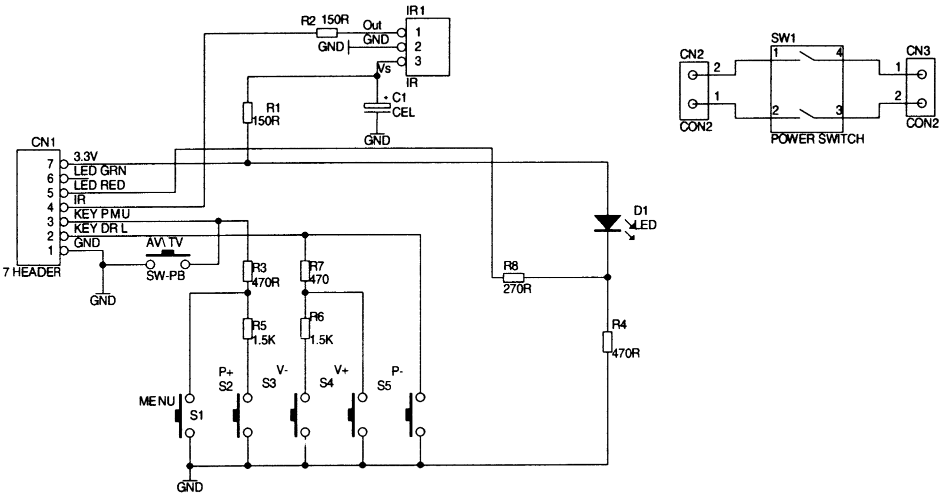
Hauptplatte – Display-Treiber / Main Board – Display Driver


DARED[0..7]
DAGRN[0..7]
DABLU[0..7]
DBRED[0..7]
DBGRN[0..7]
DBBLU[0..7]
DVS
DHS
DEN
DCLK
VS
HS
EN
DCLK
R201
0R
L201
47R
LVDS_EN
CN602
CON70
GND
DBBLU6
DBBLU7
DBBLU5
DBBLU3
DBBLU4
DBBLU0
DBBLU1
DBBLU2
+3.3V
LVDS_EN
DARED7
DARED5
DARED6
DARED4
DARED3
DARED2
DARED1
DARED0
DAGRN7
DAGRN6
DAGRN4
DAGRN5
DAGRN3
DAGRN1
DAGRN0
DAGRN2
DBGRN5
DBGRN0
DBGRN1
DBGRN2
DBGRN3
DBGRN6
DBGRN4
DBGRN7
DBRED0
DBRED1
DBRED2
DBRED3
DBRED4
DBRED5
DBRED6
DBRED7
+5V
LCD_POW
DABLU1
DABLU0
DABLU4
DABLU5
DABLU3
DABLU7
DABLU2
DABLU6
(21)
(20)
(22)
(23)
(24)
(25)
(26)
(27)
(28)
(29)
(30)
RC200
RC201
RC202
RC203
RC205
RC206
RC213
47R
AR6
AR0
AR1
AR2
AR3
AR4
AR5
AR7
AG0
AG1
AG2
AG6
AG7
AG3
AG4
AG5
AB0
AB6
AB7
AB1
AB2
AB3
AB4
AB5
DVS
DHS
DEN
U200
DS90CF383MTD
TXIN27
TXIN5
TXIN0
TXIN1
TXIN2
TXIN3
TXIN4
TXIN6
TXIN10
TXIN11
TXIN7
TXIN8
TXIN9
TXIN12
TXIN13
TXIN14
TXIN16
TXIN17
TXIN15
TXIN18
TXIN19
TXIN20
TXIN21
TXIN22
TXIN23
TXIN24
TXIN25
TXIN26
TXCLKIN
R_FB
A PIXELS
PWRDWN
TXOUT0-
TXOUT0+
TXOUT1-
TXOUT1+
TXOUT2-
TXOUT2+
TXOUT3-
TXOUT3+
TXCLKOUT-
TXCLKOUT+
LVDSVCC
LVDSGND
PLLVCC
PLLGND
GND
R205 0R
R206 0R
R207 0R
R208 0R
R209 0R
R210 0R
R211 0R
R212 0R
R213 0R
R214 0R
C204
0.1uF
C216
1N
C209
0.1uF
C217
100pF
R204
100R
R200
1K
C200
0.1uF
C201
0.1uF
C202
0.1uF
C241
10uF/10V
C219
0.1UF
L200
FERRIT BEAD
LVDS_33V
+3.3V
LVDS_EN
CN603
CON30
NC
TX3+O
TX3-O
TXCK+O
TXCK-O
LCD_POW
CN601
DF14A-20P1.25H
TX2+O
TX2-O
TX1+O
TX1-O
TX0+O
TX0-O
+5V
+3.3V
+12V
R705
0R
R706
0R
R707
0R
C700
0.1uF
C705
1uF/10V
R703
47K
U701
FDS9933A
S1
G1
S2
G2
D1
D2
LCD_POW
C706
10uF/16V
C707
0.1uF
Q701
BC848B
R701
47K
PNL_EN
12V_PANEL_EN

Bedieneinheit / Keyboard

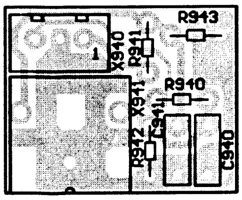
Ansicht von der Bestückungsseite / View of Component Side

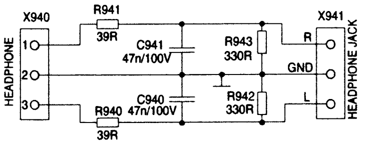

IR1
D1
1
CN1
1
SW1
CN2
CN3
R1
+ C1
R2
R8
R7
R3
R5
R6
R4
LIVE AREA
BEKO ELEKTRONIK
ZF7.191
U-
U+
MENU
AV\TV
P-
P+


IR1
R2 150R
Out
GND
GND
Vs
1
2
3
IR
R1
150R
+ C1
CEL
GND
CN1
3.3V
LED GRN
LED RED
IR
KEY PMU
KEY DR L
GND
7
6
5
4
3
2
1
7 HEADER
GND
AV\TV
SW-PB
R3
470R
R7
470
R5
1.5K
R6
1.5K
R8
270R
D1
LED
R4
470R
MENU
S1
P+
S2
V-
S3
V+
S4
P-
S5
GND
SW1
CN2
CN3
CON2
CON2
POWER SWITCH

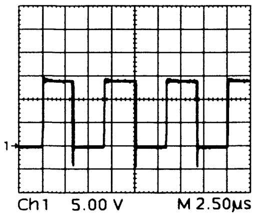
Kopfhörer-Platte / Headphone Board

Ansicht von der Bestückungsseite / View of Component Side


R943
X940
R941
X941
R940
C941
R942
C940
1


X940
R941
39R
C941
47n/100V
R943
330R
X941
R
GND
L
C940
47n/100V
R940
39R
R942
330R
HEADPHONE
HEADPHONE JACK
1
2
3

Ozillogramme / Oscillograms



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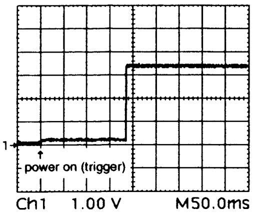

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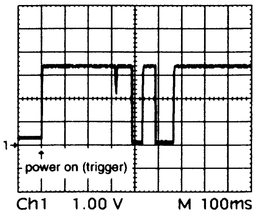

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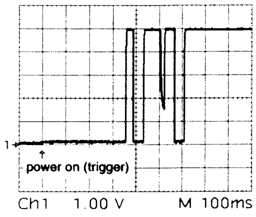

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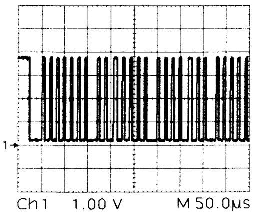

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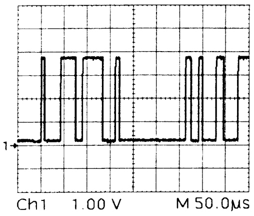
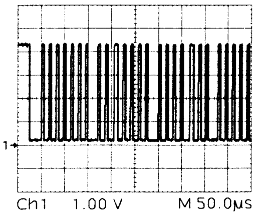


⑥



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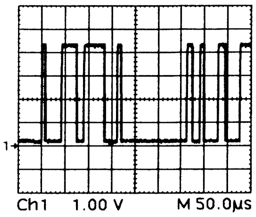

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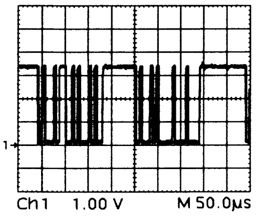

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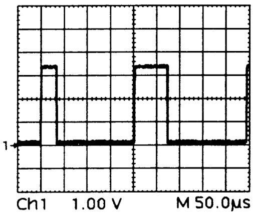

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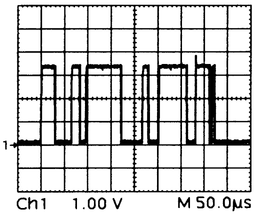

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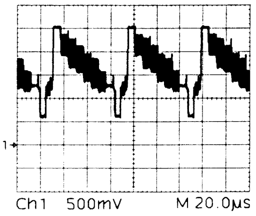

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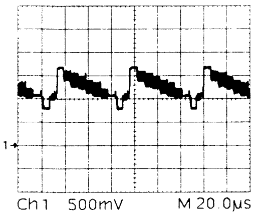

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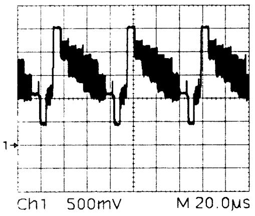

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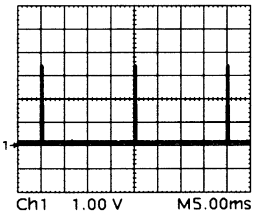

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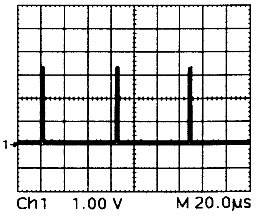

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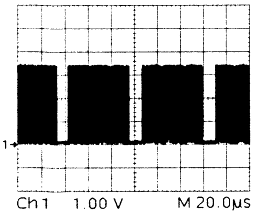

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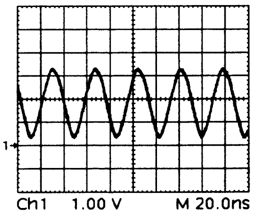

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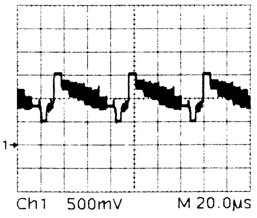

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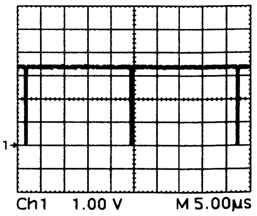

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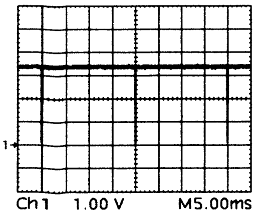

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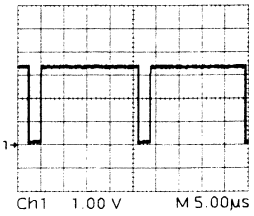

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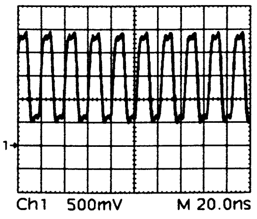

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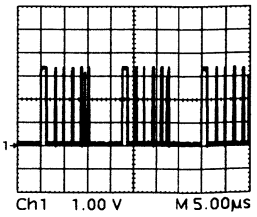

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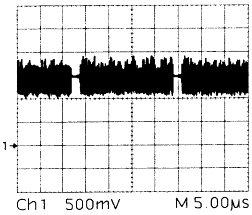

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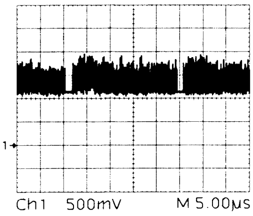

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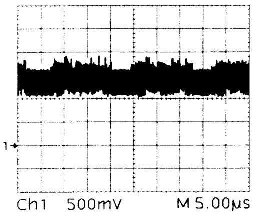

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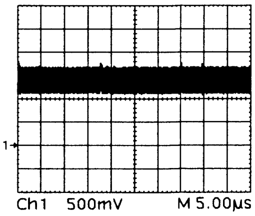

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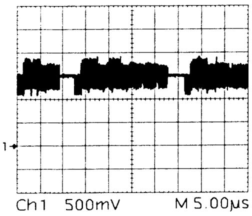

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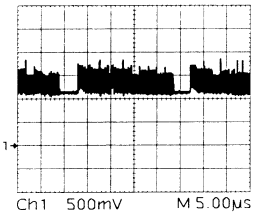

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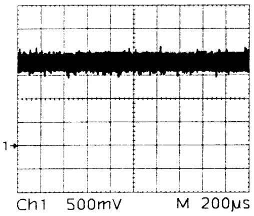

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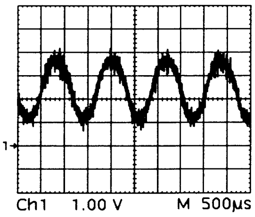

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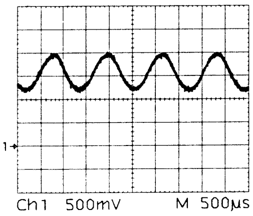
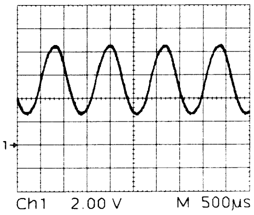
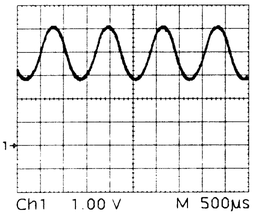


㉝ Volume 75%



㉞ Volume 75%



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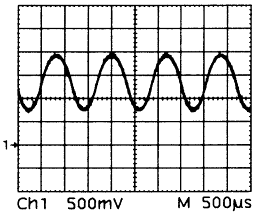
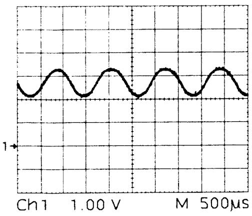


㊱ Headphone Volume 75%



㊲ Headphone Volume 75%

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Ersatzteilliste
Spare Parts List

NUR FÜR INTERNEN GEBRAUCH
FOR INTERNAL USE ONLY

TV

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AMIRA 30 LW 76-9401 TOP

MATERIAL-NR. / PART NO.: 720126007100
BESTELL-NR. / ORDER NO.: GBC1700

POS. NR. POS. NO.	ABB. FIG.	MATERIAL-NR. PART NUMBER	ANZ. QTY.	BEZEICHNUNG Ⓓ	DESCRIPTION (GB)
		720126007100		AMIRA 30 LW 76-9401 TOP KEIN E-TEIL	AMIRA 30 LW 76-9401 TOP NO SPARE PART
0001.000		759551021200		GEHAEUSEVORDERTEIL MIL. GRAU	FRONT COVER SILVER MIL. GREY
0002.000		759551021300		RUECKWAND SILBER	REAR COVER SILVER
0003.000	⚠	275990130400	X	LP-CHASSISMODUL KEIN E-TEIL	CHASSISBOARD NO SPARE PART
0004.000	⚠	759551021700		NETZADAPTER 180 W 24/5 15/4	NETZADAPTOR 180 W 24/5 15/4
0005.000		759551021800		LAUTSPRECHER 4 OHM 5 W 58X165M	LOUDSPEAKER 4 OHM 5 W 58X165MM
0006.000		759551021000		TUNER TCPQ9091PD27D(S)	TUNER TCPQ9091PD27D(S)
0007.000		759551021400		BUCHSENABDECKUNG SILBER	JACK COVER SILVER
0009.000		720116300000		FERNBEDIENUNG TP 156 C	REMOTE CONTROL TP 156 C
0010.000	⚠	759551021900		LCD DISPLAY 30" BEI DISPLAYDEFEKT ERFOLGT GERAETETAUSCH	LCD DISPLAY 30" WITH DISPLAY DEFECTIVE TAKEN PLACE EXCHANGE SET
0011.000		759550972800		KNOPF NETZ	KNOB POWER
0012.000	⚠	759550450300		NETZSCHALTER	POWER SWITCH
0014.000		275990204700	X	LP-BEDIENMODUL KEIN E-TEIL	CONTROLBOARD NO SPARE PART
0018.000		759550985500		LP-KOPFHOERERMODUL	HEADPHONEBOARD
0019.000		759551021100		KNOPF PROGRAMM MIL. GRAU	KNOB PROGRAMM MIL. GREY
0020.000		759551021500		FUSS VORNE SILBER	FOOT FRONT SILVER
0021.000		759551021600		FUSS HINTEN SILBER	FOOT REAR SILVER
		720117077000		BEDIENUNGSANLEITUNG D/GB/F/I/NL/PL	INSTRUCTION MANUAL D/GB/F/I/NL/PL
		720117077100		BEDIENUNGSANLEITUNG S/DK/N/FIN/E/P	INSTRUCTION MANUAL S/DK/N/FIN/E/P

X = SIEHE GESONDERTE E-LISTE

X = SEE SEPARATE PARTS LIST

Es gelten die Vorschriften und Sicherheitshinweise gemäß dem Service Manual "Sicherheit", Mat.-Nummer 720108000001, sowie zusätzlich die eventuell abweichenden, landesspezifischen Vorschriften!

⚠ (!)

The regulations and safety instructions shall be valid as provided by the "Safety" Service Manual, part number 720108000001, as well as the respective national deviations.

ÄNDERUNGEN VORBEHALTEN / SUBJECT TO ALTERATION

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Spare Parts List

NUR FÜR INTERNEN GEBRAUCH
FOR INTERNAL USE ONLY

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LP-CHASSISMODUL
CHASSISBOARD

MATERIAL-NR. / PART NO.: 275990130400

POS. NR. POS. NO.	ABB. FIG.	MATERIAL-NR. PART NUMBER	ANZ. QTY.	BEZEICHNUNG Ⓓ	DESCRIPTION GB
		275990130400		LP-CHASSISMODUL KEIN E-TEIL	CHASSISBOARD NO SPARE PART

POS. NR. POS. NO.	MATERIAL-NR. PART NUMBER	BEZEICHNUNG DESCRIPTION
C 1	759550949200	ELKO 10 UF/16V
CN 104	759550922900	EURO AV BUCHSE
CN 105	759550922900	EURO AV BUCHSE
D 300	759530510900	DIODE BAV 70 *SCD1590VD
D 301	830938405600	SMD Z-DIODE BZX84C5V6 SOT23
D 302	830938405600	SMD Z-DIODE BZX84C5V6 SOT23
D 303	830938405600	SMD Z-DIODE BZX84C5V6 SOT23
D 306	830938405600	SMD Z-DIODE BZX84C5V6 SOT23
D 500	832521004000	SMD DIODE BAS40-05
D 501	759550968500	DIODE BAS40
D 900	759550968400	DIODE MRA4003T3
D 901	759550968400	DIODE MRA4003T3
D 903	759550967900	DIODE 1N5820
F 900	⚠ 831562304300	SICHERUNG 4 A/T 250VAC UL 1
L 101	759550541800	SMD SPULE 22UH 20% 0805
L 103	759550541800	SMD SPULE 22UH 20% 0805
L 105	814052632600	DR AX 0411-GA 47UH 5%
L 107	814052632600	DR AX 0411-GA 47UH 5%
L 411	759550624400	SPULE 10 UH
L 800	759550541800	SMD SPULE 22UH 20% 0805
L 801	759550541800	SMD SPULE 22UH 20% 0805
L 802	759550541800	SMD SPULE 22UH 20% 0805
L 905	759551020800	SPULE 38 UH 0.05R
Q 100	830100684800	SMD TRANS BC848C/ BC847C P
Q 101	830100684800	SMD TRANS BC848C/ BC847C P
Q 102	830100684800	SMD TRANS BC848C/ BC847C P
Q 103	830100684800	SMD TRANS BC848C/ BC847C P
Q 104	830100684800	SMD TRANS BC848C/ BC847C P
Q 105	830100684800	SMD TRANS BC848C/ BC847C P
Q 106	830100684800	SMD TRANS BC848C/ BC847C P
Q 107	830100684800	SMD TRANS BC848C/ BC847C P
Q 109	830100684800	SMD TRANS BC848C/ BC847C P
Q 401	830100684800	SMD TRANS BC848C/ BC847C P
Q 402	830100684800	SMD TRANS BC848C/ BC847C P
Q 500	759550973400	TRANS 2N002
Q 501	759550973400	TRANS 2N002
Q 502	830100684800	SMD TRANS BC848C/ BC847C P
Q 503	830100684800	SMD TRANS BC848C/ BC847C P
Q 504	830100684800	SMD TRANS BC848C/ BC847C P
Q 505	830100684800	SMD TRANS BC848C/ BC847C P
Q 506	830100684800	SMD TRANS BC848C/ BC847C P
Q 507	830100684800	SMD TRANS BC848C/ BC847C P
Q 701	830100684800	SMD TRANS BC848C/ BC847C P
Q 900	830100684800	SMD TRANS BC848C/ BC847C P
R 152	759550977200	WIDERST. 0.47 OHM 1 W
U 101	759550969200	IC MSP3410G PQFP80
U 102	759550967700	IC LM78L08ACZ
U 103	759550967600	IC TDA1517P
U 200	759550968100	IC DSC90C383AMTD
U 300	759550969800	IC M24C02-MNST6T
U 400	759550969500	IC VPC3230D-C5 QFP80
U 401	759550951600	IC MC14053BD
U 500	759550969300	IC DS1818R-10
U 501	759550969700	IC SDA5550 PLCC-84
U 505	759550968300	IC M29W040B70N1T
U 506	759550519300	IC CHIP AT24C16AN 10SI TAPE
U 600	759550968700	IC GM5020
U 701	759550968600	TRANS FDS9933A
U 800	759550969600	IC K4S161622E
U 801	759550969600	IC K4S161622E
U 802	759550969600	IC K4S161622E
U 900	759550968900	IC LM2596S-5.0
X 100	759550926200	QUARZ 18.432 MHZ
X 400	759550967300	QUARZ 20.25 MHZ HC49-U
X 500	759550967500	QUARZ 6 MHZ CL 20 PF
X 600	759550968000	QUARZ 24 MHZ

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⚠ (!)

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ÄNDERUNGEN VORBEHALTEN / SUBJECT TO ALTERATION

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Ersatzteilliste
Spare Parts List

NUR FÜR INTERNEN GEBRAUCH
FOR INTERNAL USE ONLY

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LP-BEDIENMODUL
CONTROLBOARD

MATERIAL-NR. / PART NO.: 275990204700

POS. NR. POS. NO.	ABB. FIG.	MATERIAL-NR. PART NUMBER	ANZ. QTY.	BEZEICHNUNG Ⓓ	DESCRIPTION ⒼⒷ
		275990204700		LP-BEDIENMODUL KEIN E-TEIL	CONTROLBOARD NO SPARE PART

POS. NR. POS. NO.		MATERIAL-NR. PART NUMBER	BEZEICHNUNG DESCRIPTION
AV/ TV		759550451400	TASTSCHALTER
D 1		759550931600	LED ROT
IR 1		759550969900	TRANS TSOP34838 SS1A
MENU		759550451400	TASTSCHALTER
P+		759550451400	TASTSCHALTER
P-		759550451400	TASTSCHALTER
SW 1	⚠	759550450300	NETZSCHALTER
V+		759550451400	TASTSCHALTER
V-		759550451400	TASTSCHALTER

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